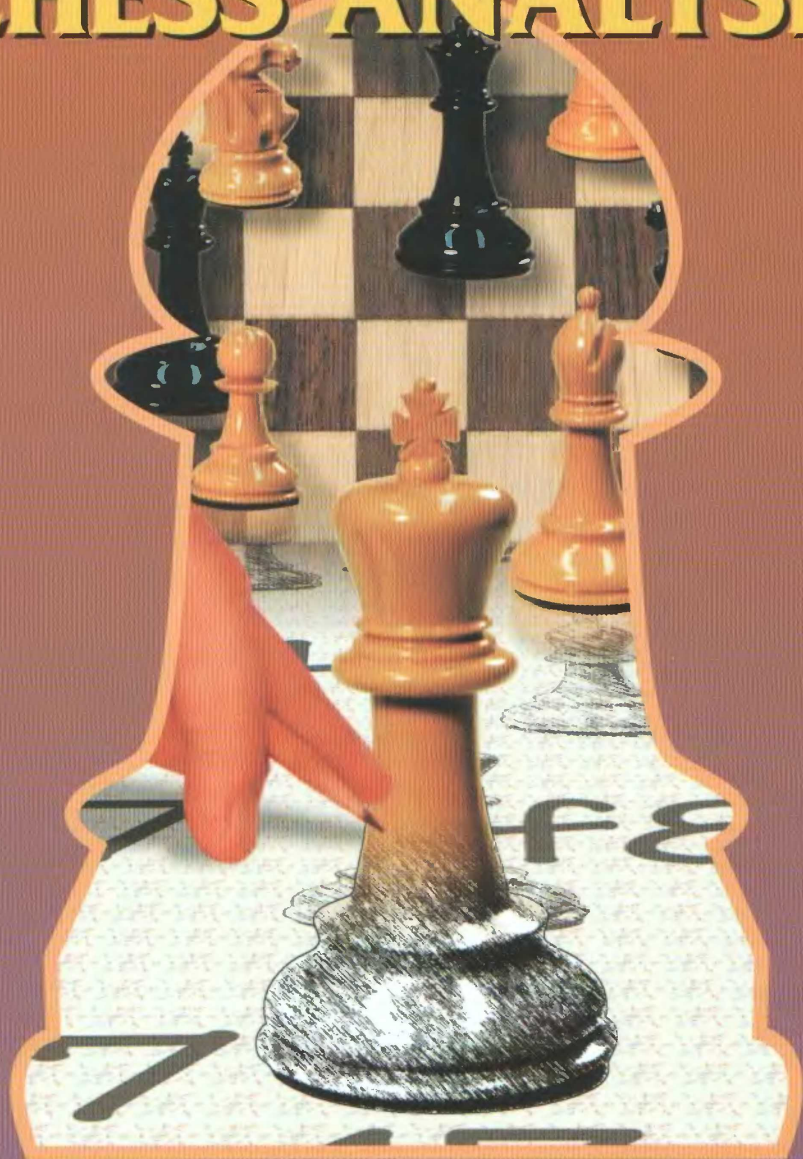


PRACTICAL CHESS ANALYSIS



A Systematic Method For Analyzing

Mark Buckley
USCF Senior Master

Practical Chess Analysis
A Systematic Method for Analyzing

Mark Buckley, *Senior Master*

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Methodology

On occasion I have been asked to describe my study methods, how I look at a particular position, and so on. In trying to convey useful answers to these questions, I come back again and again to *method*. For only with a workable technique can a player hope to improve his analysis — the approach must be applicable to any particular position.

This book is the result of my wish to share what I have learned about chess analysis: how to *see ahead*, how to *judge a position*, how to *study*. I have tried my best to present the essentials, the heart of the matter, trusting that you may apply these suggestions and develop your own analytic tools.

As a result, my explanations may seem a bit uneven: here, detailed notes, there, a terse hint. This is deliberate, to keep you thinking. Over the board you are self-sufficient and cannot rely on the opponent to query poor moves. The analytic punctuation appears only after the game. So look upon my omissions as your chance to forge ahead with your own analysis.

Mark Buckley

Instead of a Preface

When I took my first steps in chess, I had no thought of method or system. Everything was new, and it did not occur to me that a systematic approach to mastery would be needed. But later, out of need — I had meantime discovered I wasn't quite World Champion — I began to search for order on the board. I found that more experienced players were either unwilling or unable to give me any clues to guiding my further steps. And chess books, while interesting, seemed increasingly general and lacking any information on proper thinking. The key to using the chess literature eluded me.

My solution to this problem seemed reasonable enough at the time: to study everything that I misunderstood or disliked. The all-around master was my model. I reckoned that if something was mysterious, I would unravel it; if it was unpleasant, I would learn to like it.

Because I disliked endgames (leftovers!) I paid special attention to them, and soon, aiming for the better ending became my favored strategy. Other weak spots were attacked similarly, with more or less success. For instance, if an annotator claimed that a certain attacking line should win, I would try all defenses that seemed plausible, seeking to refute the master. Only after every resource was exhausted would I admit the notes were correct.

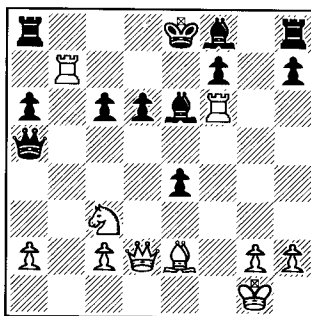
In this way I learned what underlay the published analysis. By my tackling the tough questions and correcting my own misconceptions, the game slowly revealed some of its secrets. I still use the same approach today to further strengthen my game.

Introduction:

What Is Analysis?

A game from the 1962 USSR Championship:

1. e4 c5 2. Nf3 d6 3. d4 cxd4 4. Nxd4 Nf6 5. Nc3 a6 6. Bg5 e6 7. f4 Qb6 8. Qd2 Qxb2 9. Rb1 Qa3 10. Bxf6 gxf6 11. Be2 Nc6 12. Rb3 Qa5 13. Nxc6 bxc6 14. f5 exf5 15. 0-0 Be6 16. Rb7 fxe4 17. Rxf6.



White's forces dominate the open lines, while the two missing pawns are hardly felt. Black's uncastled King and backward development quickly lead to the conclusion that a crushing blow must soon fall.

17... 0-0-0 18. Rxf7 Bxf7 19. Rxf7 d5 20. Kh1 Kb8 21. Nxe4 Qxd2 22. Nxd2 Re8 23. Bxa6 Re1† 24. Nf1 Bc5 25. g4 Rf8 26. Rxf8 Bxf8 27. Kg2 h6 28. Kf3 Bd6 29. Bd3 Ra1 30. Ne3 Bxh2 31. Nf5 c5 32. Nxh6 c4 33. Bf5 d4 34. g5 Be5 35. g6 Rxa2 36. Nf7 Bg7 37. Nd6 d3 38. cxd3 c3 39. d4 Bxd4 40. Bb1 c2 41. Bxc2 Rxc2 42. Nf5 Bf6, 0-1.

Surprisingly, the diagrammed position (from Novopashin—Korchnoi) favors Black, whose free development and active Queen are just enough to avert the attack and bring the material plus to bear. But only a clear analysis of the game, as opposed to intuition, could discover *in time* that Black stood better and allow Korchnoi to aim for this position.

What Is Analysis?

Essentially, *analysis is an evaluation of the prospects for both sides in a given position*. This evaluation may range from pointing out a winning one-move threat to detailed suggestions regarding lengthy and obscure complications. An analysis should indicate general strategies, plans for executing those strategies, and most important, tactical lines. In short, *analysis points out who stands better and what should be done about it*.

In the example above, White chose a sharp attacking system but missed the moves 15. exf5 and 17. Qd4. By failing to unpin his Knight, White doomed his attack; his Rooks alone were not enough to win. After 15. exf5 Korchnoi gives 15... Qe5 16. 0-0 d5 17. Bd3 Bc5† 18. Kh1 Be6 with unclear complications. And instead of White's 17. Rxf6, he suggests 17. Qd4 Qe5 18. Qb6 Qxc3 19. Rb8† Rxb8 20. Qxb8† Ke7 21. Qc7† Bd7 22. Bg4 Bh6 23. Bxd7 Kf8 24. Be8 Kxe8 25. Qc8† Ke7 26. Qxh8 with a slight plus for Black. Such involved calculations are typical of this gambit variation of the Sicilian Defense. You may also have noticed the inaccuracies in this endgame. Perhaps because of time pressure, Black's 24th (he should play 24... c5) and White's 32nd move (32. Ne7!) were errors.

Situations in which an obvious advantage fails to win tend to puzzle us. Why didn't White's superior mobility triumph? How did the position differ from many others that White has won using this Poisoned Pawn line? The answer is everything depends on the specific setting. True, this is not a very useful answer, but for White's attack to win, all of Black's resources must be destroyed. And whenever the balance of power is fairly level in a sharp position, analysis becomes the only way to tell who stands better. In order to understand what is involved

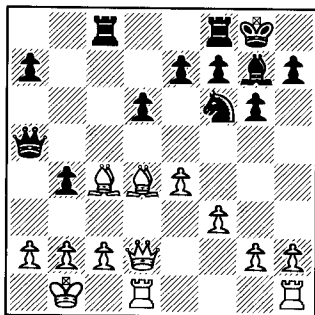
here, let's look at the more general question of what makes a good player-analyst.

Differences Between Experts And Novices

Studies show that the great difference between experts and novices lies with their intuitive judgment, the knowledge they bring to the board. The master sees numerous strategic and tactical patterns that the beginner misses. For example, in the Benoni Defense Black would be loath to offer the exchange Bg7xNc3 without substantial compensation, because of the Bishop's special value; in contrast, the exchange Bb4xNc3 often favors Black in the Nimzo-Indian Defense. The difference is in the pawn structure, a major element in any positional evaluation. Experts are adept at just such pattern recognition.

You may recall, as a beginner, the unlimited number of moves that seemed plausible at each turn. With experience, you learned to discard most of these moves because you knew that they were wrong. Similarly, a typical master player has contested a vast number of quick games (five-minute and the like) in addition to his serious tournament battles. This experience develops the intuition because many common problems are seen and solved repeatedly. Over time, scores of games may be played focusing on the same theme, so the master tends to think in terms of ideas well known to him.

As Fischer wrote (*My 60 Memorable Games*), referring to a win against Larsen's Sicilian Dragon played at Portoroz 1958: "I'd won dozens of skittles games in analogous positions and had it down to a science: pry open the KR-file, sac, sac ... mate!"



From the diagram, the attack crashed through as expected:

16. Bb3 Rc7 17. h4 Qb5 18. h5 Rfc8 19. hxc6 hxc6 20. g4 a5 21. g5 Nh5 22. Rxc6 gxc6 23. g6 e5 24. gxf7† Kf8 25. Be3 d5 26. exd5 Rxf7 27. d6 Rf6 28. Bg5 Qb7 29. Bxf6 Bxf6 30. d7 Rd8 31. Qd6†, 1-0.

Thus, *refinement takes precedence over originality*. The modern master is eclectic, borrowing schemes and adapting them to his purpose. Among world-class players, Capablanca, Fine, Reshevsky, and Fischer all derived invaluable benefit from their speed-chess apprenticeships. They mastered the principles of sound chess through actual play.

The essence of this immersion technique is in directly confronting specific problems. When the player fails to grasp a particular endgame stratagem today, and loses, he will surely get another chance tomorrow. Considering the limited number of themes (as distinct from settings), the *active player soon sees most everything several times*. And each time a familiar situation is repeated, the determined student tries to perfect his mastery. Ambitious players also seek out new problems to round out their game: the quiet position player attempts some wilder, tactical chess, for instance. Herein lies the difference between the would-be master and the enthusiast who concentrates solely on positions he enjoys.

To parallel the development of a player who uses the intense immersion technique — constant play and analysis — without matching the great investment of time, the reader can take on specific faults and correct them. For instance, suppose you suffer from time pressure; how would you cure this trouble?

Well, you could try Botvinnik's suggestion, playing practice clock games with the primary goal of reaching the time control. The training would continue (says Botvinnik) until you managed your minutes efficiently and played at your usual level of skill.

Perhaps this rather mechanical method would work, but it

might well produce unpleasant side effects. Rushing your moves can lead to superficial judgment, carelessness, and lack of confidence — problems just as serious as time trouble. A more subtle technique would seek the underlying causes. Does the trouble stem from inadequate preparation, lack of practice, indecision, or something else? Maybe deeper opening study would allow you to reach a familiar middlegame without delays; perhaps you wait for the clock to goad you into action. In any case, Botvinnik's proposal implies that the student cannot discover these causes for himself, but must simply exert his will in order to alter the result.

Errors And Action

My premise is that *the aspiring player must find the causes of his errors and take action*. Learning from experience is fine, and necessary, but it is also time-consuming and costs many points on the tournament table. By looking at your past efforts, you will definitely see that most errors fall into categories. Random blunder is not the main cause of defeat. For instance, do you remember how many games in which you entered the endgame by playing a careless waiting move? If the advantage seems to disappear in the ending, maybe the “beginning of the end” is to blame. Noting such a weakness may well save some valuable points.

Applying our confront-the-problem method to the general analytic process, we aim to improve the basic skills of foresight and judgment. *The ability to see ahead depends on the clarity of the image held by our mind's eye*. By practicing in the fundamentals of calculation, this image can be strengthened step-by-step. The specific exercises will be fully explored in the following section, “Training the Mind's Eye.”

Judgment in chess obviously constitutes the core of analysis. Because intuitive judgment is too vast a subject to be tackled in full, we try to sharpen our thinking by degrees. Over time, these specific studies coalesce to improve our overall judgment.

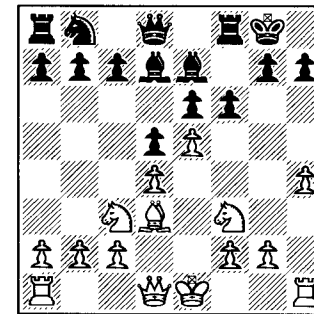
Suppose you have just lost a game in which the two Bishops figured prominently, and you want to hone your technique

using **these pieces** (or fighting against them). Start by looking through books and magazines and find three or four games that illustrate the power of the Bishops. Most any positions featuring the Bishops can be analyzed, but games annotated by masters work best. Then you have a guide for your trek. The task is to answer all pertinent questions about the two-Bishop stratagem, examining not only what was played in the games, but all the important alternatives.

Focus on moves that puzzle you, because *your* questions are the crucial ones for learning — even if the annotator fails to address them. We call this study of related games the *typical-position* method and cover it in Chapter 2.

Schematic Thinking

A third skill brings together your foresight and judgment: schematic thinking. Aim to see the game in terms of multi-move sequences and plans in conflict. For, after all, chess is a battle of ideas. For example, the stock combination against h7 (Bd3xh7†, Ng5†, Qh5) is a scheme. Though hackneyed, it appears as a unit. We merely check to see whether the sacrifice is “on.”



In the diagram (Schlechter—Wolf, Vienna 1894), White wins: 1. Ng5 fxg5 2. Bxh7† Kxh7 3. hxg5† Kg8 4. Rh8† Kf7 5. Qh5†.

Other plans can benefit from similar treatment. Moreover, haphazard jumping from one idea to another, a common failing in analysis, is avoided when you think schematically.

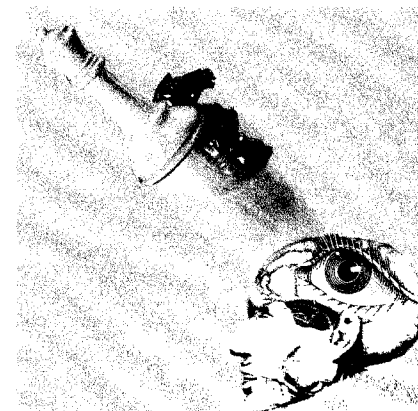
Schematic thinking also helps you decide in advance if an

idea is sensible, long before you must commit yourself to a specific tactical line. For example, a point that you can attack twice, but which is guarded three times, is probably not a likely target in the absence of a concrete reason to the contrary. If you believe that special reason exists, proceed with the analysis — but with a substantially narrower scope for the search. A more detailed study of this topic is given in the section on schematics, starting with Chapter 7.

1: Training the Mind's Eye

What is the essence of a chess master's art? Fundamentally it consists of the ability to analyze chess positions.

— M.M. Botvinnik



Perhaps the most baffling question to the beginning chess player (and not only to him) is “how do you see ahead?” There is great mystery in a skill that enables the expert to clearly see a situation that is far different from the one on the board. Even more amazing is blindfold chess, played without even looking at a board. Clearly, foresight cannot be mastered by reading about it. Practice is needed.

Because calculation hinges on our skill in holding the chessboard's image, we must somehow sharpen our mind's eye. If, for instance, during lengthy calculation your pieces begin to stray from their squares, you know the problem. Suppose the combination you contemplate appears successful in gaining material. Yet an unpleasant doubt arises: you are not sure that your King is safe from counterattack; the picture in your mind is not quite clear enough. So you face a dilemma. Do you gamble boldly, holding that fortune favors the brave, or do you retreat in the belief that chess is not poker? In either event, you are relying on guesswork rather than calculation. And while such situations cannot be avoided entirely, the range of your vision can be extended.

Know The Board

In order to predict what may happen on the board, you must be familiar with the ranks, files, and diagonals that form the chess terrain. The name and color of each square should

be known without recourse to the board — yes, literally memorized. Otherwise, during analysis you will not be certain where the pieces can move. Too much time will be lost in merely finding legal moves to consider. Therefore, reliable foresight begins with knowing the most permanent feature of the game — the board.

To simplify the task of memorization, take the board one quarter at a time, starting with the a1 corner. Look at the long diagonal, the squares a1, b2, c3, and d4. Think of them as a unit. Adjacent to this line are the short diagonals a3-b4 and c1-d2. Note also the crossing diagonals, a3-b2-c1 and a5-b4-c3-d2-e1. The grid of dark squares can be reinforced in your mind if you conduct a Bishop's tour of these squares. On an empty board, place an imaginary Bishop on c1 and mentally play the piece successively to a3, b4, a5, c3, a1, b2, and c1. With practice, the interconnection of the squares will become etched in your memory. Use the same method to memorize the light-square diagonals, the ranks, and files. Incidentally, the great blindfold expert George Koltanowski recommends this memorization technique to anyone interested in playing without sight of the board.

The Clarity Of The Mind's Eye

Once the board is committed to memory, each square can be named, identified by color, and located on the lines intersecting it. For example, c5 is a dark square at the intersection of the a3-f8 and a7-g1 diagonals. The coordinate notation designates the ranks and files, so we know that c5 is on the c-file and fifth rank. In practice, the clarity of your mind's eye should rival your direct eyesight, functionally if not visually. This means that connections are precise: you know without looking that a Bishop on c7 strikes h2 and not g2. *Because tournament rules prohibit moving the men for analysis, when you look ahead you are effectively playing blindfold.* You can still refer to the board, of course, but the future position must be held just as firmly in mind.

After the board, we naturally consider the pieces and how they move. The novice player learns how to make legal moves

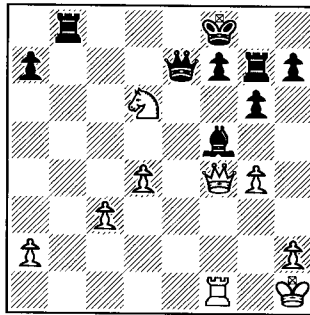
and soon does not bother about such elementary matters. What more is there to learn about how the men move? Well, to see ahead you first need to know the squares to which a piece may move. In your mind's eye, these possible moves must be as obvious as when the actual position is set on the board. These potential moves enliven the piece, giving it an "aura." The aura refers to the array of squares available to the piece. Beginners' books indicate these to show how the pieces move. For example, the King occupies the center of a nine-square array. A Rook on d4 produces an aura on the d-file and fourth rank.

The aura is unaffected by obstructions. Think of the piece as if it were on an open board. Try to fuse the piece to its aura. The idea is simply that potential moves determine the value of any piece, and the aura comprises just those moves. In the next example (*Portisch—Karpov, Moscow 1977*), the black Queen move to g5, which seemed so unlikely a few turns earlier, shatters White's peaceful encampment.

1. Nf3 Nf6 2. g3 b6 3. Bg2 Bb7 4. 0-0 e6 5. d3 d5 6. Nbd2 Nbd7 7. Re1 Bc5 8. c4 0-0 9. cxd5 exd5 10. Nb3 Bb4 11. Bd2 a5 12. Nbd4 Re8 13. Rc1 c5 14. Nf5 Nf8 15. d4 Ne4 16. dxc5 Nxd2 17. Nxd2 Qg5 18. Nd6 Bxd2 19. Nxb7 Bxe1 20. Qxe1 Rxe2 21. Qxe2 Qxc1† 22. Qf1 Qd2 23. cxb6 Rc8, 0-1.

The blocked, well defended square g5 proved useful after all. The point to note is that such squares cannot be ignored simply because they are presently unavailable.

Let's exercise your analytic ability without moving the pieces. Set up the board as in the next diagram, and imagine the continuation 33. gxf5 gxf5 34. Nxf5. Determine who stands better and write down your variations, starting with Black's 34th move. Try to fix the future position in mind, first removing the captured pieces and adjusting the auras of the pieces that move. Let each new position soak into your imagination.



The diagrammed position is a possible variant from an exhibition game *Larsen—Fischer, Stockholm 1962*. Black wins after 33. gxf5 gxf5 34. Nxf5 Qb7† 35. Rf3 Qxf3† 36. Qxf3 Rb1†. Notice in particular the easily missed opening of the g-file: the Rook's aura bursts forth there. Accustom yourself to finding such nuances by taking every opportunity to solve published chess problems and quizzes, emphasizing speed when solving the easy ones.

When studying annotated games, it is a good practice to examine all the notes at least twice: first, without moving the pieces, critically follow the analysis; second, play through the note to check the accuracy of the analysis and the clarity of your mental image. Compare what you imagined on the first pass to the board position as you play out the moves. Make note of what you failed to see. For instance, it is quite easy to miss horizontal Rook moves because we are accustomed to the Rook traveling vertically until it reaches the seventh or eighth ranks.

Be Aware Of Faulty Thinking

For maximum benefit after tournament games, retrace your thinking to check your analysis of the critical points. You may discover that you imagined nonexistent dangers or overlooked some sharp tactic. Always be alert to patterns of faulty thinking.

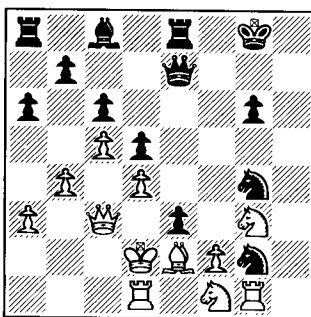
As you look ahead, the image of the future position becomes increasingly vague and renders judgment difficult. To extend the range of your "radar," look at the board position and re-

trace the sequence of moves to the forward position. At each move, trace the auras of all the significant pieces and pawns that figure in the battle. This process sharpens the vision by fixing in mind any changes that occur. You don't as easily forget which pieces have been captured or moved. Tracing the auras can also strengthen your awareness of tactical surprises.

Blindfold players practice the reinforcement technique by replaying the game mentally. After each move while the game progresses, they replay the game from the first move in order to keep the image fresh and accurate. (With practice, these replays can actually take only a few seconds.) You can borrow this idea when you analyze: run through your intended line several times until your mind's eye retains a clear picture of the future position. Over time, you will get clear images with only one or two tracings of the move sequence. Then you are able to confidently assess the position that follows your intended line.

Exercise Your Mind's Eye

Begin exercising your mind's eye with moderately difficult problems. Steadily build your strength — like the weight lifter who gradually increases the weight of the barbell. Calculation need not be many moves deep (although that helps), but it should be practiced frequently. Korchnoi, the foremost exponent of play by calculation, has said that he requires 100 games a year simply to maintain this skill. He also suggests you study chess books without using a board, doing all the analysis in your head — excellent practice if you are up to it. And if this regimen seems excessive, consider by what other means the skill of calculation can be learned. Why not practice during home study and casual games, then show your tournament opponents what you have achieved?



To get a feel for what is involved in training the mind's eye, let's examine a line of play from the diagrammed position (Landau—Fine, Amsterdam 1936) after Black's 24th move. Black is a pawn up and trying to rip open a path to White's King. White has all his forces developed, including the King, while Black is still backward in this respect. Therefore, the first player may have some chances for counterplay against Fine's King. The position is sharp.

In order to improve your vision, you may like to try following the analysis without moving the pieces. On each move, carefully examine the new position, noting changes such as newly opened lines, captures, and piece movement. (Speed in calculation is not important yet.) When the changes are fixed in the mind, analyze the possible moves. General characteristics in the position should be used to find specific variations. Let's now return to the diagram.

Fine's analysis begins: **25. fxe3 N2xe3**. Now the R/d1 is attacked; White can respond by moving the Rook or taking (26. Bxg4). For simplicity we look only at the obvious capture **26. Nxe3**.

Black has two recaptures, with the Queen or the Knight. Taking the Knight move first, Fine gives **26... Nxe3 27. Rde1 Qg5**. Do you see the veiled threats, Q/g5 vs. K/d2, and R/g1 vs. Q/g5? Concentrate on these auras.

28. Ne4. A surprising discovery. If your mind's eye is out of focus, run through the move sequence again from the diagram: 25. fxe3 N2xe3 26. Nxe3 Nxe3 27. Rde1 Qg5 28. Ne4. Black's Queen is attacked by the R/g1 and the N/e4. The

Knight also threatens in some cases to land on f6, winning the exchange. Thus 28. Ne4 is logical in that it prepares the most dangerous attack. Retrace the auras of Black's Q/g5 and N/e3 as well as White's Rooks and Knight.

The next move is hard to foresee: **28... Nf1‡**. The double check saves the Queen and removes the defense of the R/g1.

There follows **29. Kd1**. Now the configuration of pieces is:

White — K/d1, B/e2, R/e1, R/g1, N/e4, and unmoved, Q/c3, Ps/a3, b4, c5, d4, with the P/f2 and N/f1 captured;

Black — Q/g5, N/f1, and unmoved, K/g8, B/c8, R/e8, R/a8, Ps/a6, b7, c6, d5, g6 with the N/g2 and P/e3 captured.

Such bookkeeping helps maintain a clear image when you analyze.

White's Rook hangs, so **29... Qxg1** is natural (although as an additional exercise you might study 29... Ne3‡ 30. Kc1).

Fine gives **30. Rxf1** with an "attack which is not so easy to meet." Let's see: the Q/g1 is under fire from the R/f1; moreover White intends Nf6‡ winning back the Exchange. If necessary, run through the move sequence from the diagram again to refresh the image: 25. fxe3 N2xe3 26. Nxe3 Nxe3 27. Rde1 Qg5 28. Ne4 Nf1‡ 29. Kd1 Qxg1 30. Rxf1.

Who Is Ahead In Material?

Count up the material. It is vital to know at all times who is ahead. In the diagram, Black was a pawn up. Meanwhile, a pair of pawns have been traded along with a pair of horses (e3); and the black N/f1 has been lost for the R/g1. So Black is now the exchange and a pawn up. When many pieces have been captured, it is easiest to keep in mind only the material imbalance. That is, as soon as a piece is recaptured, consider the material even. Don't bother keeping the entire list of exchanges in your head. *When one side gains material, note only how much he is ahead.*

Analysis Continues Until The Position Is Quiet

In general, analysis continues until a quiet position is reached. Evaluation is difficult while pieces stand attacked (unless all the loose pieces are on one side). In our exercise, it

is Black's move and he must apparently hasten the Queen to either g2 or h2. Check to see that these are the only available flight squares: f2 and h1 are guarded by the R/f1, e3 by the Queen, g3 and g5 by the Knight, and g4 by the Bishop. On the reply 30... Qh2 there can follow 31. Nf6†. If the King protects the R/e8, then the discovered check 32. Ng4 (unveiling the R/f1) wins the Queen.

If 30... Qg2 31. Nf6† Kf7 32. Nxe8 Kxe8 33. Qe3† Qe4 34. Qxe4† dxe4 35. Rh1 with a winning bind. If the position is clear enough, see whether Black can escape.

Let's return to Black's 30th move. To stop both of White's threats, 31. Rxf1 and 31. Nf6†, Black has the logical 30... Qxf1† 31. Bxf1 Rxe4 repelling the attack with a winning advantage. A nice resource that begs the question: Can't White play 30. Nf6† before taking Black's N/f1?

Returning to the diagram once more, let's consider the alternate capture on Move 26: 25. fxe3 N2xe3 26. Nxe3 Qxe3†. This is simpler than 26... Nxe3 because it's more forcing. Fine concludes with 27. Qxe3 Nxe3 28. Rde1 Nf5 and writes, "Blacks remaining difficulties are purely technical." Note that now the pawns on d5 and g6 restrict the dangerous N/g3-R/g1 battery. Black's scheme could run as follows: ...Nxc3-Bf5-Kg7, and after forcing off a pair of Rooks on the e- or h-files comes the advance of the g-pawn.

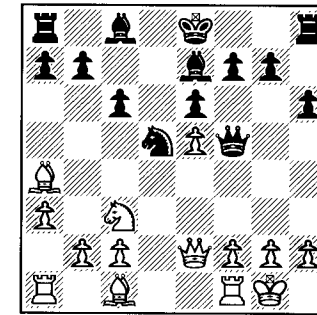
What To Do When The Image Is Too Vague

In the attempt to follow written notes blindfold, the possible moves (auras) of all involved pieces should be constantly traced in order to fix each new position in mind. When the image is too vague, advance the board position one move toward the desired forward position to help you analyze.

Before leaving the subject of mind's-eye training, another exercise in following published analysis may be useful. In the next case, we trace the thought of *Mikhail Tal* (White) in his 6th match game versus *Larsen* in 1965.

1. e4 Nf6 2. e5 Nd5 3. d4 d6 4. Nf3 dxe5 5. Nxe5 e6 6. Qf3 Qf6 7. Qg3 h6 8. Nc3 Nb4 9.

Bb5† c6 10. Ba4 Nd7 11. 0-0 Nxe5 12. dxe5 Qg6 13. Qf3 Qf5 14. Qe2 Be7 15. a3 Nd5.



The Danish grandmaster has played in his usual provocative style, tempting Tal to attack. A deep combination is launched with **16. Nb5**. Strategically, this move redeploys the Knight so that 16... 0-0 is answered by 17. Nd4 Qh7 18. c4 Nb6 19. Bc2.

Therefore, the main variation begins with **16... cxb5 17. Qxb5†**. Now we can reject both 17... Kf8 18. Qe8 mate and 17... Bd7 18. Qxd7†, mentally playing **17... Kd8**.

Tal wants to clear the d-file, so his next threat is **18. c4**. The Knight can flee to b6, c7, or f4. (On 18... a6, 19. Qa5† b6 20. Qd2 regains the piece with continuing threats.) If the Knight alights on c7, 19. Rd1† wins outright. And 18... Nb6 19. Qa5 leads to:

- 1) 19... Bd7 20. Be3 Kc7 21. c5;
- 2) 19... Kc7 20. c5 Kb8 21. cxb6 axb6 22. Qb5 Ra5 23. Qb3.

with good winning chances, according to Tal. Nevertheless, Larsen should have tried this last line. Instead, he gave back the piece at once (18... Qxe5), after which White's attack broke through.

Our interest lies in the line beginning **18... Nf4**. The obvious continuation is **19. Rd1† Kc7**.

A little reflection will lead you to conclude that **20. Rd7†** is the only follow-up: **20... Bxd7 21. Qxd7† Kb8** (21...

Kb6 22. Be3† mates) **22. Qxe7**. So far we have the line 16. Nb5 cxb5 17. Qxb5† Kd8 18. c4 Nf4 19. Rd1† Kc7 20. Rd7† Bxd7 21. Qxd7† Kb8 22. Qxe7. Now 23. Qd6† threatens, hence **22... Qxe5** is the answer.

White wants his other pieces in play, and **23. Be3** presages 24. Rd1-d8†; for instance, 23... f6 24. Rd1 Qc7 25. Rd7. Tal's analysis continues **23... Ng6 24. Qxf7 Qf6**. From the diagram we have this line: 16. Nb5 cxb5 17. Qxb5† Kd8 18. c4 Nf4 19. Rd1† Kc7 20. Rd7† Bxd7 21. Qxd7† Kb8 22. Qxe7 Qxe5 23. Be3 Ng6 24. Qxf7 Qf6. The forced nature of the position aids our analysis.

White now has a serious problem. His Queen faces eviction (25. Qd7 Rd8). Tal's foresight (he had to see all of this before venturing 16. Nb5) uncovered **25. Be8**. Observe that the Q/f7 is defended, the N/g6 attacked, and on 25... Ne5 26. Bf4 White's Queen guards the Bishop. The threats are 27. Qd7 and 27. Re1. Black cannot escape by trading Queens, the usual defensive procedure, because 25... Qxf7 26. Bxf7 Nf8 27. Bf4† Kc8 28. Rd1 entombs his pieces. And on 25... Ne7, 26. Rd1 (not 26. Bf4† e5) leads to a position in which the Bishops dominate Black's Rooks and Knight. One can marvel at the analytic skill necessary to unearth 25. Be8 ten moves in advance.

Finally, Tal gives **25... Qe7** (25... Qd8 26. Qxg6 Rxe8 27. Qxg7) **26. Qxg6 Rxe8** (26... Qxe8 27. Qxg7 with a material plus positional advantage).

27. Bc5 (yet another beautiful point: 27... Qxc5 28. Qxe8† Qc8 29. Qf7 Qxc4 30. Qxg7) **Qd7 28. Bd6† Kc8 29. c5**. Tal says that the Bishop is stronger than a Rook. The freeing attempt 29... b6 succumbs to 30. Qe4 Qb7 31. c6. After 29. c5, White need only add his Rook to the fray.

Retracing The Combination

Now retrace the combination's main line from 16. Nb5 and assure yourself of its soundness. Try any defense that seems plausible and, without moving the pieces if possible, find the proper continuation for White. If the image becomes too vague, simply advance the position on the board until your mind's

eye can retain a clear picture. The ideal is to hold the entire tactical operation in mind just as we did earlier with the stock combination Bxh7†, Ng5†, and Qh5. When you finish with the mental analysis, play the moves out on the board to clarify any unresolved points. You will probably find a few oversights. **Strengthening the foresight takes time, so don't despair!** If you are able to see that all the moves of the combination are legal and reasonable, that will be a good first step. The exercise's main object is to force an extra effort.

In learning to calculate several moves deep, the first task is to follow lengthy notes, mentally recording the moves (as in Tal—Larsen). Later, you can trace the annotations more critically, examining lines not considered in the notes and trying out possible improvements. By using the written notes as a crutch, you can gradually take on more of the analytic burden until you are analyzing on your own. The benefit to over-the-board creativity is limited only by the effort you expend on improving your analytic skill.

Before we close this chapter, let's look at two practical tips to sharpen the tools of analysis. Probably all players have experienced the unpleasant feeling that they "saw" a surprise move that they somehow did not stop to examine; they just let it pass by without a critical look, only later realizing what was missed. As someone once said, in genius we see our own rejected thoughts.

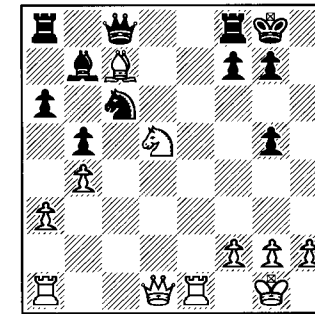
Obviously Unplayable Moves

A simple technique can catch some of these slippery fish. First, as you look at the position briefly consider only the most bizarre and surprising moves: sacrifices, pawn breaks, and other desirable but "obviously unplayable" moves. If it seems that your Knight would be active on f5, analyze the move even if it cannot be correct. You can discover many interesting ideas using this technique. Just a quick glance, looking for this kind of move, is required.

The Doublecheck

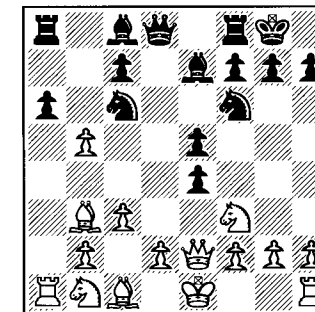
Our second tip comes into play when you look ahead toward an intricate position. Slow down your thinking and give “normal” moves a momentary double check. Maybe you don’t need that last preparatory move before your combination begins, maybe a sharper move will work better. The alertness that comes from the extra check is well worth the few seconds invested. Remember: beautiful themes often lie quietly in the most tranquil settings, waiting for the patient player to discover them. Don’t cheat yourself with hasty analysis.

EXERCISES



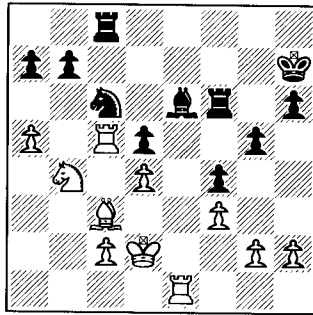
QUESTION: After 19. Qh5 Qf5 how does White continue?

ANSWER: From Alekhine’s notes to Alexander—Tylor, Nottingham 1936: 19. Qh5 Qf5 20. Re5 Qg6 [Ed.: This facilitates White’s quick win. 20... Qh7 is more troublesome. Then, 21. Rxg5 f6! slows White.] 21. Rxg5 Qxh5 22. Nf6† mates.



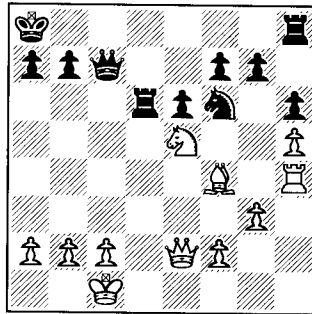
QUESTION: After 10. Ng5, does ...Bg4 refute the attack?

ANSWER: From Alekhine—Löwenfisch, St. Petersburg 1914: No, 11. Nxf7 Rxf7 12. Qc4 (not 12. Bxf7† Kxf7 13. Qc4† Be6 14. Qxc6 Bd5) wins the Exchange.



QUESTION: Why didn't Black play the simplifying 27... Ne7?

ANSWER: From Smyslov—Letelier, Venice 1950: 28. Nxd5 Nxd5 29. Rxe6 Rxc5 30. Rxf6 Rxc3 (30... Nxf6 31. dxc5 Nd7 32. Kd3-c4) 31. Rd6 with a pawn.



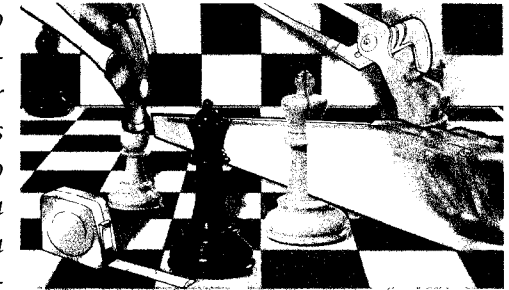
QUESTION: Analyze 23. Nxf7 and 23. Nc4. Which is stronger?

Answer: From Tal—Hübner, Montreal 1979: If 23. Nxf7 e5! 24. Nxh8 exf4 25. Rxf4 Rd8 26. Rc4 Qd7 27. Ng6 Qd5 regains one pawn with active pieces and no real weaknesses. The game went 23. Nc4! Ne8 (23... e5 24. Bxe5 Re6 25. Bxc7 Rxe2 26. Nb6#) 24. Rg4 Qe7 leaving Black's pawns weak.

2: Developing Your Intuition

When I am trying to find the best move, I just look at the position, trying to find a general idea. I follow my intuition. After that, when I think that this is the best move, I start to calculate variations. You must calculate and you must also use your intuition.

— B. Spassky



The planning process draws heavily on your experience. As you look at the board, you know what opening system was used, where the main theaters of action lie, and can without doubt name half a dozen general principles that might apply to your situation. The question is: how do experience and intuition evaluate ideas over the board? And how can a stronger intuition be developed?

Pattern Recognition Is The Answer

The answer is in learning to see patterns — landmarks — such as isolated pawns, misplaced pieces, and stock combinations. *Pattern recognition is the heart of intuition.* The pattern represents something familiar, something already evaluated. Because the experienced player has often already studied a similar position to the one set before him, he largely knows what to do without much thinking. His judgment is sound; he refines and confirms, in most cases, what the pattern tells him. This experience saves time and effort over the board and lets the player concentrate on the position's *unique* features. For instance, the standard procedure for coping with the opponent's backward pawn is common property: keep the pawn from advancing, pile up pressure on the file, then win the pawn

or switch fronts before the defense can react. Or, as Nimzovich put it, “restrain, blockade, destroy.” Similarly, if you know a stock combination such as Black’s c3 Exchange sacrifice in the Sicilian (Rc8xNc3), your play is stronger, more confident should the opportunity for this attack arise.

How Do You Develop Your Intuition?

To develop your intuition, analyze typical positions from your favorite openings and middlegames, as well as from common endings. By typical positions, I mean those which feature clearly one or more themes that govern planning: isolated d-pawns, bad Bishops, offside Knights, weak Rooks, and so on. For each theme, study three or four games to improve your understanding of the problems that occur.

Consider the group of games to embody a strategic idea. For example, studying several games featuring the well-known two-Bishop sacrifice (Bxh7†, Bxg7) will quickly show you why this attack is a stock combination. The prerequisites for its success become obvious.

We divide these study positions into two categories:

- 1) the dynamically equal situations where there are chances for both sides, and
- 2) positions that are known to be advantageous.

Studying equal positions benefits your theoretical knowledge, understanding of pawn structure, and awareness of likely combinations. Studying advantageous positions improves your technique of winning the won game. You discover how to make use of material and how to neutralize counterplay.

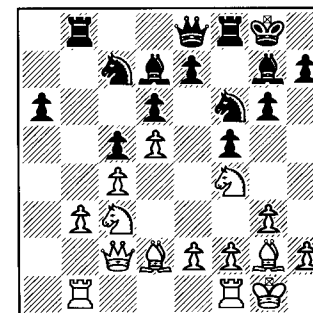
Because the number of strategic themes is limited, you can study problems that will certainly occur in future games. (An analogous idea is found in sports when teams practice predetermined plays for a later game.) A look at the games of Petrosian suggests that he has thoroughly mastered the ending Rook + Knight versus Rook + Bishop, especially those cases in which the Knight is the stronger minor piece. Think of the comfort this knowledge gave him when planning the game. He could enter the ending confident that all its problems were

known to him. And, of course, this endgame was not the only one he knew profoundly, it was merely one of his favorites.

In the opening, a player has a deceptively easy time using his experience. The accepted moves and strategy are often widely published. Large numbers of games, played and analyzed by top masters, do wonders for the self-confidence. But this trust in the ideas of others can lead to trouble. You may very well leave the opening certain of your advantage, yet lacking any idea of how to proceed. So examine the openings you play in connection with the ensuing middlegame. Recognize that omniscient *theory* is no more than a haphazard collection of lightly annotated games.

The following position you may know as stemming from the Dutch Defense, Leningrad variation. In this game (*Taimanov—Tal, USSR 1969*), White characteristically plays to exploit e6.

1. c4 g6 2. g3 f5 3. d4 Bg7 4. Bg2 d6 5. d5 c5 6. Nh3 Nf6 7. Nc3 Na6 8. 0-0 Nc7 9. Bd2 0-0 10. Qc2 Rb8 11. a4 Bd7 12. Nf4 a6 13. a5 Qe8 14. Rb1 b5 15. axb6 Rxb6 16. b3 Rb8.



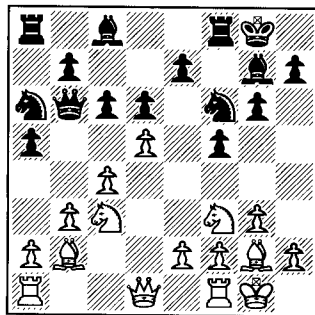
The game resembles a King’s Indian except for the advanced f-pawn. A typical struggle has arisen over the value of this advance: is Black’s extra control of e4 worth the weakening of e6? The continuation will confirm that Black has lost the battle here. On the queenside, Tal tried 14... b5 to create a weakness on c4 and open the b-file. This plan was frustrated because 13. a5 and 15. axb6 indirectly guarded c4; thereafter the b3-

pawn was easily protected. A standoff in this sector meant that White could turn his attention to the center, where the primary target lay.

Looking at the diagram, we see that an advance and exchange of White's e-pawn will clear the e-file and expose the backward pawn. The f5-pawn does not halt e2-e4, and a potential counterattack in the center is limited to ...e7-e6. But that push simply lays bare new targets after d5xe6. Hence Tal must remain quiet in the center.

Finally, no serious plans come to mind for Black on the king-side. For instance, chasing White's Knight with ...g6-g5 simply increases the strength of the inevitable break e2-e4. Tal is left with the slender hope that Taimanov's gradual preparations and the remoteness of e6 might allow time for defense. Therefore, White has a free hand to set up the decisive blow.

So what should Tal have done to avoid these problems? Other than choosing the Nimzo-Indian (his solid defense), he could have created a more reliable Dutch setup by reserving the c-pawn to pressure White's center (c7-c6). By keeping the front fluid, Tal could distract attention from e6. A standard position is shown in the next diagram; White must play resolutely to maintain a slight initiative. Compare this to Tal's rigid plan, in which he clarified the center and allowed Taimanov to secure the queenside.



White was able to direct the gravity of the battle to the center, where he held the advantage. Especially important to White's smooth development was the Knight on f4. Tal was so impressed by this maneuver that he subsequently avoided

the Dutch fianchetto unless Ng1-f3 had already been played.

Chief Differences In Positions

Conclusion: The positions of Black's c-pawn and White's King Knight form the *chief difference* between the two diagrams, between a playable defense and disaster. When you study typical positions, look for these crucial (and often subtle) differences amid the obvious similarities. Study the concrete plans you might consider were you facing the same situation over the board. Understanding the source of each advantage is your goal.

Returning to Taimanov—Tal, the remainder of the game sees imaginative tactical play from Taimanov in converting his positional plus into material gain.

17. e4 e5 18. dxe6 Nxe6 19. Nxe6 Qxe6 20. Rbe1 Kh8 21. Bh3 Ng4 22. Nd5 Bd4 23. Bc3 Bxc3 24. exf5 Qxe1 25. Rxe1 Bxe1 26. Bxg4 Kg8 27. Qb2 Bxf5 28. Bxf5 gxf5 29. Nf6† Kg7 30. Nd7† and 1-0 in 44 moves.

Depending on the depth of your preparation, a typical position from an opening may occur after (say) 10 or 15 moves. Better preparation pushes back the point at which concrete variations give way to general planning. At the highest levels, the endgames which might plausibly arise from openings are subject to intense study. For example, in preparing for the 1963 World Championship, Tigran Petrosian analyzed an endgame flowing from a Grünfeld variation Botvinnik was known to favor. That very ending appeared in Game 5 and brought Petrosian victory.

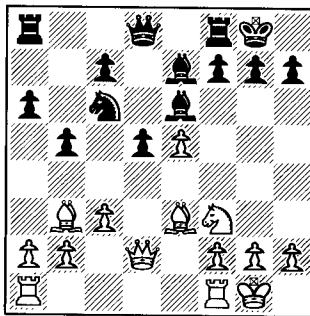
Look Carefully At Book Verdicts

To begin your own study, simply examine a point where your favorite opening monograph renders its verdict: +—, —+, ♣, ±, or = (assuming there is anything left to analyze). Try to turn the promised advantage into something material. Or see if you can convert the opponent's plus into

nothing. Work out specific plans. Look especially at those moves the book recommends hesitantly, citing many alternatives. At those points you can find effective continuations that take the opponent into uncharted territory.

If you challenge the book lines and test a few of them in quick games with a friend, you will familiarize yourself with the problems of the opening. Realize that merely memorizing the opening lines produces a brittle style easily upset by nonbook moves. Be thankful such a style is commonplace.

A position typical of the Ruy Lopez, Open Variation, is found below. Not being sharp or critical, the position illustrates the opening all the clearer. White has a spatial plus (e5) and chances to dominate the dark squares (d4, c5); Black has fine development and queenside prospects if he can advance his c-pawn. Black to move considers two ideas:



Black to move.

- 1) immediate queenside play with 12... Na5, and
- 2) bolstering the center with 12... Qd7.

White naturally opposes any attempt to equalize. He can try to pressure d5 by 13. Rad1 or attack h7 via 13. Bc2 and 14. Qd3. The h7 threat would encourage g7-g6 in reply, and the dark squares then might prove weak (Bg5 or Bh6). More subtle, after Black's 12... Qd7, is the immediate exchange of Bishops with 13. Bg5 — subtle because no time is lost provoking g7-g6. Counterplay would have less time to develop. Let's look at some specific lines.

1) 12... Na5 13. Bc2 Nc4 (interesting is ...c5 14. Bh6) 14. Qd3 g6 15. Bh6 Re8 16. Qd4 f6. Black exchanges on e5 and seems to weather the attack. A position to be tested (e.g., 15... Nxb2 16. Qe2 Re8 17. Nd4).

2) 12... Na5 13. Nd4 Nc4 14. Bxc4 dxc4 15. f4 Bd7 16. f5 c5 17. f6 cxd4 18. Bxd4 Re8 19. fxe7 Qxe7. This position is apparently equal, though White's 20. Rf3 poses some problems. Black can defend with 20... Rac8, intending ...Rc6-g6.

3) 12... Qd7 13. Rad1 Rad8 14. Qd3 Rfe8 15. Rfe1 g6 16. Bg5 Na5 17. Bf6 Nxb3 18. axb3 Bg4. Again the balance is not disturbed, and a characteristic late middlegame appears.

4) 12... Qd7 13. Bg5 Rad8 14. Rfe1 Rfe8 15. Nd4 Na5 16. Bxe7 Qxe7 17. f4 c5 18. Nxe6 Nxb3 19. axb3 Qxe6. In this line, the kingside pressure was nicely neutralized by the queenside expansion.

By concentrating on what happens when the adversaries clash, the opening as a whole is clarified. One analytic session with several typical positions from an opening gives an excellent grasp of the tactical problems likely to arise in the game. In the example above, the positions following the four lines are the points of departure. Together they constitute typical positions that stem from the last diagram. The important point to remember is that comparisons must be made; otherwise, the typical position or positions become merely individual games unrelated to any specific theme or variation.

A careful analysis of any position means knowing the past moves and the future possibilities: the position is simply a snapshot of an ongoing process. Landmarks such as bad Bishops or weak pawns are important only in that they suggest and shape future actions. These actions determine who stands better.

In the last example, the "weak" square c5 should have beckoned White. But just try finding a way to exploit that square. Not easy. On the other hand, White's kingside chances may initially appear somewhat abstract. *They become concrete if you analyze more deeply the first suggested line.*

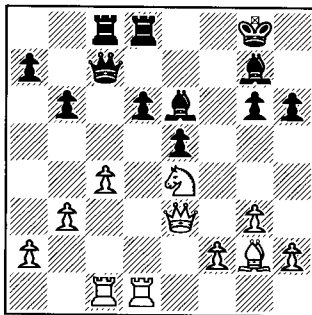
When examining selected positions related to a certain theme, you refine your intuition because you actually see what

typical advantages mean and how to exploit them. (*Study of typical positions is a shortcut to general strategic understanding.*) In an analogous way, most endgame books contain little more than analysis of typical endings. The player interested in finding where he went wrong looks up the appropriate chapter (say, Two Bishops v. Bishop & Knight) to discover the general plan to follow. The next time a similar ending arises, he knows what to do. The same approach can be applied to other phases of the game — the difference is that middlegames have not been catalogued like the ending; you must create your own catalog.

Specific Landmarks

The second kind of typical position involves one or more specific landmarks. These may include weak pawns or squares, misplaced pieces, passed pawns, and spatial advantages. The next example, from *Smyslov—Denker, USSR—USA 1946*, serves to clarify some of the mysteries of backward pawns and bad Bishops.

1. e4 c5 2. Nc3 Nc6 3. g3 g6 4. Bg2 Bg7 5. d3 e6 6. Be3 Nd4 7. Nce2 d6 8. c3 Nc6 9. d4 cxd4 10. Nxd4 Nxd4 11. Bxd4 e5 12. Be3 Ne7 13. Ne2 0-0 14. 0-0 Be6 15. Qd2 Qc7 16. Rfc1 f5 17. c4 fxe4 18. Nc3 Nf5 19. Nxe4 Nxe3 20. Qxe3 h6 21. Rd1 Rfd8 22. Rac1 Rac8 23. b3 b6.



Smyslov's first thought was probably, "Can I win the back-

ward d-pawn?" No subtlety is required to find White's plan, a pile-up with the Rooks. Therefore:

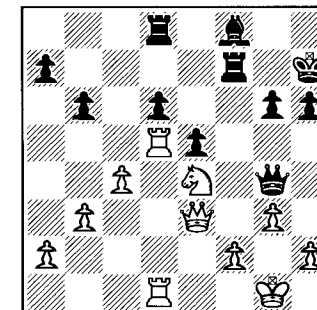
- 1) 24. Rd3 d5 is a feeble "try";
- 2) 24. Rc3 Rd7 25. Rcd3 Rcd8 26. Qd2 Bf5 27. Rxd6 Rxd6 28. Nxd6 Kh7 precludes a saving check on d5 and prepares ...Bf8 winning the wayward horse.

So the direct attack fails. What next? Well, the pawn structure fairly begs White to trade light-squared Bishops. d6 would be even weaker (no nettlesome threats to the Knight), and without hope of ...d6-d5 Black would be quite passive.

Thus 24. Nc3 is a natural move, intending 25. Bd5 forcing off the Bishops. If Black resists the trade by 24... Kh7, the white Bishop goes to e4. Smyslov indicates two plans after 24. Nc3 Kh7 25. Be4 26. h4 with h4-h5 soon to come, and 26. Nb5 followed by 27. Qd3. In both cases, White combines threats to the kingside and center.

Returning to the position in the diagram, Black has scant hope of avoiding the exchange of Bishops. Thereafter, he would be tied to d6 and unable to offer resistance to further pressure such as h4-h5 or c4-c5. To sidestep this throttling, Denker attempted counterattack, surrendering the d6-pawn for some freedom. Smyslov thus found himself in a well-known situation: having lost the positional battle, the opponent sacrifices something, reluctantly turning the game into a sort of gambit.

24. Nc3 Qe7 25. Bd5 Kh7 26. Bxe6 Qxe6 27. Rd3 Rc7 28. Rcd1 Rf7 29. Ne4 Bf8 30. Rd5 Qg4.



Again the d-pawn is dead but won't lie down. I don't think you will have much trouble refuting 31. Nxd6. Smyslov actually played **31. R1d3** and gives the possible defense 31... Qe6 32. Qd2 Rfd7 33. c5 bxc5 34. Nxc5. As stated before, Denker has already decided on counterattack as the best chance, and he made a quiet move, **31... Be7**, preparing ...Rdf8. Now White had to calculate whether taking the pawn would grant too much counterplay. If so, Smyslov would have to maneuver further, perhaps inflicting another weakness on Black (for instance, a4-a5) or driving back the active Queen (say, Kg2 and h2-h3). There is no sense in capturing a pawn if the opponent gets enough play to cloud the issue.

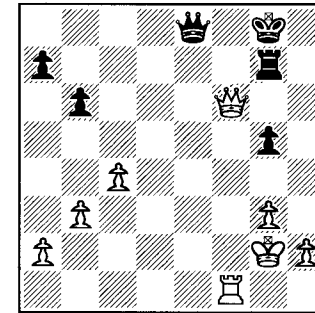
Let's now analyze the problem facing Smyslov: 32. Nxd6 Bxd6 — this time there is no choice — 33. Rxd6. Black can now play 33... Rdf8 or 33... Rxd6.

The second line is simpler, we look at it first: 33... Rxd6 34. Rxd6; now 34... Qf5 35. Kg2 and 34... e4 35. Qd4 are clear. So Black must play 33... Rdf8, attacking f2. Smyslov can try the direct defense 34. Rd2 or the aggressive 34. Qxe5, intending to maintain the initiative. The reply must be (34. Qxe5) 34... Rxf2. Then comes 35. Rd7† R(either)f7 36. Rxf7† Rxf7 37. Rd8 aiming for mate. Does Black have a check? No, White's King is safe. Black must try 37... g5 or 37... Rg7. The first allows 38. Qh8† Kg6 39. Rd6† Kf5 40. Qc8†.

The second defense is more stubborn: (37... Rg7) 38. Qe8 g5 39. Qh8† Kg6 40. Rd6† Kf7 41. Qxh6. Now look carefully. (Try to analyze this second position in your mind's eye with your chessboard set before White's 32nd move. The sequence is 32. Nxd6 Bxd6 33. Rxd6 Rdf8 34. Qxe5 Rxf2 35. Rd7† (R)f7 36. Rxf7† Rxf7 37. Rd8 Rg7 38. Qe8 g5 39. Qh8† Kg6 40. Rd6† Kf7 41. Qxh6.) Black must defend with 41... Qf5. Now the obvious 42. Qh5† Ke7 43. Rd1 is not so easy after 43... Rf7. But 42. Rd1 Qc5† 43. Kg2 is fine. The checks are ended, and the second wave of attack can be prepared. All seems in order; the pawn can be taken.

**32. Nxd6 Bxd6 33. Rxd6 Rdf8 34. Qxe5 Rxf2
35. Rd7† Rf7 (either Rook) 36. Rxf7† Rxf7 37.**

Rd8 Rg7 38. Qe8 g5 39. Qh8† Kg6 40. Rd6† Kf7 41. Qxh6 Qf5 42. Rd1 Qc5† 43. Kg2 Qe7 44. Rf1† Kg8 45. Qf6 Qe8.



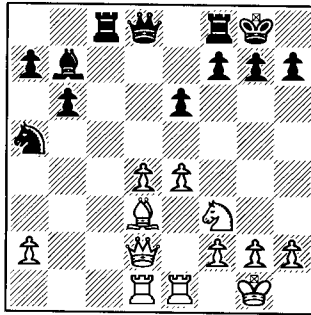
White must regroup his pieces to win. Extra material does not eliminate the need for planning, so Smyslov decides to put his Rook on e2 and Queen at e4. This setup defends the white King (especially along the a8-h1 diagonal) and allows threats such as Qd5† and Qe8†. Observe how Smyslov achieves his ideal configuration.

46. Qf5 g4 47. Rf2 Qe7 48. Qd3 Rg5 49. Re2 Qf8 50. Qe4 Rg7 51. Qd5† Qf7 52. Re6, 1-0.

Black has not a single decent move — *zugzwang*.

A Straightforward Method for Comparative Study

We now examine some typical positions and a straightforward method for comparative study. The following position, typical of the Semi-Tarrasch Defense, portrays White's classical development — a broad pawn center and centralized Rooks. Such a position in general form may also arise from other Queen's Gambit variations.



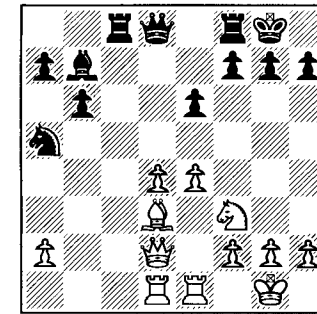
The center pawns will advance, creating kingside attacking chances or a passed pawn. Black's prospects are longer term: his swift deployment aims to repel the attack, and his queenside majority can advance. Because the attackers are so active, the defender must play precisely in such positions — usually he knows before the game which plan he will try. So we will consider the diagram favorable to White even if theory claims equality. Our study therefore focuses on White's plan.

The tempo of attack (whether directed centrally or kingside) depends on the opponent's counterplay. If the defender cannot undertake anything, the attack may proceed slowly; otherwise, no time can be lost. Black's Knight is heading for c4. Ideally for Black, this piece leads the queenside counterplay while covering e3 and e5. And if Bxc4 is played, simplification reassures Black's King.

Black would like to play 16... Nc4 17. Qf4 Nb2 18. Rd2 Nxd3 19. Rxd3 Rc2. White gains nothing on 16... Nc4 17. Qe2 b5. If White fails to attack with his impressive forces, a few exchanges will grant Black a comfortable game. A look at the defender's plan gives White an idea of the limited time for preparing the attack.

Let's consider first White's kingside chances. His Bishop, Queen, and Knight must bear on the target; hence, the e-pawn will advance. There are two means: e4-e5 directly, and d4-d5, e6xd5, e4-e5. The virtues of the pawn sacrifice include denying d5 to Black, preventing Bb7xNf3, weakening f5, clearing d4, and opening the e-pawn's path.

It's time for specific lines:



1) 16. e5 Bxf3 17. gxf3 Nc4 18. Bxc4 Rxc4 19. d5 exd5 20. Qxd5 Qg5† 21. Kh1 Rc2 is fine for Black;

2) **16. d5 exd5 17. e5**, and now:

a) 17... h6 18. Nd4 (intending Nf5, e5-e6, or Qf4) Nc4 19. Qf4 Qg5 defends — so sharper is 17... h6 18. Qf4 Nc4 19. Qf5 g6 20. Qh3 Kg7 21. e6. Compare 18. Nd4 and 18. Qf4 for a practical definition of “sharper.”

b) **17... Nc4 18. Qf4 Nb2**. Now 19. Rd2 is spineless: 19... Nxd3 20. Rxd3 Rc4. **19. Bxh7†** is the only way to test White's setup. **19... Kxh7 20. Ng5† Kg6** (else 21. Qh4-h7 wins) **21. h4**. Black can oppose the threat 22. h5† with:

- 21... f6 22. h5† Kxh5 23. g4† Kh6 24. Qh2† Kg6 25. Qh5#.

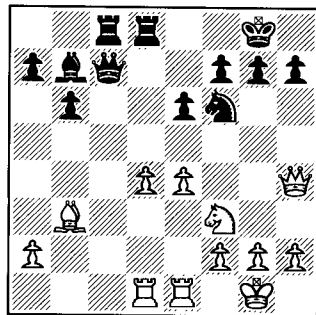
- 21... f5 22. Rd4 Rh8 23. g4 Qf8 24. h5†.

- **21... Rc4** with lasting complications. We follow the game *Polugaevsky—Tal, USSR 1969*. **22. h5† Kh6** (22... Kxh5 23. g4† Kh6 24. Qh2†) **23. Nxf7† Kh7 24. Qf5† Kg8 25. e6 Qf6 26. Qxf6 gxf6 27. Rd2** (27. Nd6 is probably better) **Rc6** (on 27... Rb4, 28. a3 angles for 29. Rd4-g4) **28. Rxb2 Re8** (here 28... Bc8 29. Nh6† Kh7 30. Nf5 Rxe6 31. Rc1 is only slightly better) **29. Nh6† Kh7 30. Nf5 Rxe6 31. Rxe6 Rxe6 32. Rc2 Rc6 33. Re2 Bc8 34. Re7† Kh8 35. Nh4 f5 36. Ng6† Kg8 37. Rxa7, 1-0.**

Clearly, the latter stages of this combinative attack are hardly calculable from the diagram; the continuation must be estimated or prepared beforehand. Knowing Polugaevsky's penchant for deep opening study, one must suspect he laid a snare

for Tal.

The foregoing analysis of the diagrammed position is naturally not exhaustive. The 19. Bxh7† combination contains many pitfalls and will repay study, especially in connection with the next game.



Similar in strategy to the first game is *Keres—Fine, Ostend 1937*. The Estonian recommends 18. e5, with three branches:

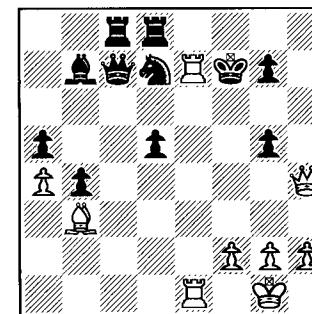
1) 18... Nd5 19. Ng5 h6 20. Ne4 Nc3 (else 21. Nd6 or 21. Rd3) 21. Nf6†;

2) 18... Bxf3 19. exf6 Bxd1 20. Qg5 Kf8 21. Qxg7† Ke8 22. Rxe6†;

3) 18... Nd7 19. Ng5 Nf8 20. Ne4 Bxe4 21. Qxe4 with advantage. Black can't force a Queen trade and must allow d4-d5 in conjunction with f4-f5 or kingside Rook lift. Black's queenside advance is too slow and his Knight is passive.

Instead, the game continued **18. Re3 b5 19. R1e1 a5** (19... h6!) **20. a4 b4** (after 24... bxa4 21. Bxa4 h6 Black has a plus, i.e., if 22. h3 then White's long prepared for kingside attack is halted and Black can advance on the queenside: 22... Rb8 [intends ...Ba6/Ba8 and ...Rb4]. If 23. g4 Qf4 or 23. e5 Nd5 24. Re4 Ne7! [24... Nc3 25. Rg4 is risky] 25. Rg4 Nf5 defends while hitting d4. If White doesn't attack, Black advances the a-pawn later.) **21. d5 exd5 22. e5** (*djà vu*) **Nd7** (Keres gives 22... Ne4 23. e6 fxe6 [Black should consider 23... f5!? as he isn't lost yet—MB] 24. Rxe4 dxe4 25. Ng5 Qc3 26. Bxe6† Kf8 27. Rf1 as winning. However, White's mate after

27... Rb8 is not evident while Black's b-pawn favors him in any ending.) **23. Ng5 Nf8** (On 23... h6 24. e6 hxg5 25. exf7† Kxf7 26. Re7† Keres gives two continuations:



After 26. Re7† (analysis)

1) 26... Kg6 27. Qd4 Qc3 28. Bc2† [Ed.: Keres' analytical (intuitive?) powers at times can be amazing. As proof, a possible continuation: 28... Kh5 29. Qd1† g4 30. h3! Rc4! 31. hxg4† Rxd4 32. R1e3 Qd4! 33. Rd3! and soon to mate.];

2) 26... Kg8 27. Qxg5 Qc3 28. h4 Qf6 29. Bxd5† Bxd5 30. Qxd5† Kh8 31. Rxd7. [But, Black improves with 28... Rc5 so White should play 28. Bxd5† with at least a draw.—MB])

24. Nxh7 Nxh7 25. Rh3 Qc1 26. Qxh7† Kf8 27. Re3 d4 28. Qh8† Ke7 29. Qxg7 Rf8 30. Qf6† Ke8 31. e6 (now 31... dxe3 32. exf7† Rxf7 33. Bxf7† Kd7 34. Qe6†), **1-0**.

Apply Selective Study To Any Group Of Positions

Together, these games and notes give a good picture of White's attacking chances in the Semi-Tarrasch. They also demonstrate kingside attacking techniques in general. You can apply the method of selective study to any group of positions. Find a problem that puzzles you, then collect a few similar specimens and analyze them as a group. Simply seeing the games together tends to reinforce your understanding of the themes in question.

Before leaving this Semi-Tarrasch study, let's not forget

White's alternate strategy, the creation of a passed pawn. Rather than provide detailed analysis, we merely note the classic instance of this plan, *Spassky—Petrosian, Game 5, 1969*.

1. c4 Nf6 2. Nc3 e6 3. Nf3 d5 4. d4 c5 5. cxd5 Nxd5 6. e4 Nxc3 7. bxc3 cxd4 8. cxd4 Bb4† 9. Bd2 Bxd2† 10. Qxd2 0-0 11. Bc4 Nc6 12. 0-0 b6 13. Rad1 Bb7 14. Rfe1 Rc8 15. d5 exd5 16. Bxd5 Na5 17. Qf4 Qc7 18. Qf5 Bxd5 (18... h6) 19. exd5 Qc2 (19... Nb7) 20. Qf4 Qxa2 21. d6 Rcd8 22. d7 Qc4 23. Qf5 h6 24. Rc1 Qa6 25. Rc7 b5 26. Nd4 Qb6 27. Rc8 Nb7 (27... a6 28. Re8 Qxd4 29. Rxf8† Rxf8 30. Rxf8† Kxf8 31. Qc5†) 28. Nc6 Nd6 29. Nxd8 Nxf5 30. Nc6, 1-0.

Look For Unique Tactical Elements In Each Attack

Analogous games (see Alekhine—Euwe, 1937 in the supplemental section) are readily available and have instructional value. These games differ markedly in execution, yet are strategically similar. Study the unique tactical elements in each attack; the next time a roughly equivalent position confronts you, workable plans more readily spring to mind.

The most practical study centers on typical positions from your opening repertory. If you find attack burdensome, analyze thoroughly several attacking games featuring your favorite system. Test *every* defense that you think might refute the attacks. Leave no question unanswered. Afterwards, the combinations will seem more coherent, more convincing.

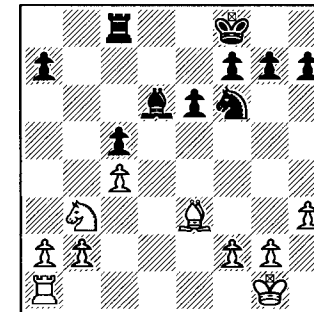
Deepen Your Attacking Technique

If you fancy yourself an attacking wizard, try your hand at defending against the systems you favor. Find games in which the defender repels your pet attack. This uncompromising approach can only deepen your attacking technique — or force you to change systems!

The study of endings can follow a procedure similar to that shown above. You gather examples of the theme or technique you want to examine and analyze them as a group. The next

two examples concern the exploitation of an endgame weakness, a weak pawn. In both cases, Black has a vulnerable pawn on c5 and White maneuvers to increase the pressure. Note the preventive tacking that allows White to maintain his edge while he gains new advantages.

Example 1: Alekhine—Zvetcoff, Buenos Aires 1939.

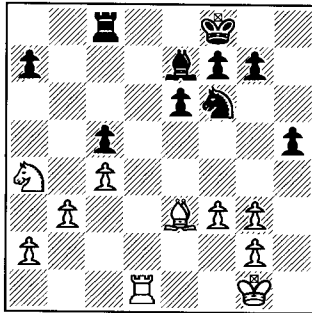


White's formal assets include the more active Rook and Bishop as well as an obvious pawn target. The general plan begins with restraint of Black's pieces (tethering them to c5) and pawns (preventing the formation f5, e5).

24. Rd1 Ke7 25. Na5 Be5 26. Rd3 Rc7 (26... Bxb2 27. Rb3 results in swapping the b-pawn for the a-pawn: bad business for Black) 27. Rb3 Nd7 28. f4 Bd6 29. Kf2 Nb6 30. Kf3 Kd7 31. Rd3 Ke7 (Black must watch for the combinative breakthrough b3-b4, c5xb4, c4-c5. Alexander gives 32. b4, but 32... cxb4 33. Rxd6 Kxd6 34. c5† Kd5 is good for Black. Alekhine blocks the kingside before striking.) 32. g4 f6 33. h4 Na4 34. Rb3 Nb6 35. Rb5 Kd7 36. h5 Ke7 37. a3 (Now White protects the c-pawn with his King and renews the attack on a7 and c5 by bringing the Knight around to b5. Observe the inflexibility of Black's forces in their attempts to guard the pawns. In particular, the Bishop cannot reach a more useful defensive square, b6.) Kd7 38. Ke4 Ke7 39. Kd3 Kd7 40. Nb3 Na4 41. Nd2 Kc6 42. b3 Nb6 43. Ne4

Nd7 44. Ra5 Be7 45. Nc3 Rb7 46. Nb5 Kb6 47. b4 a6 48. Nc3 Kc7 49. Rxa6 cxb4 50. Nb5† Kd8 51. axb4 Bxb4 52. Rxe6 Bc5 53. Bd2 Nf8 (As an exercise, find and analyze the threat that forced this dismal retreat.) **54. Rc6 Nd7 55. Ke4 Ke7 56. Kd5 Bg1 57. Bb4† Kd8 58. Ke6, 1-0.**

Example 2: *Korchnoi—Karpov, Game 29, 1978.*



This ending holds some similarity to Alekhine—Zvetcoff. The significant differences lie in the kingside pawn array and the less active role for White's Rook. Korchnoi therefore plays to open the kingside enough to mobilize his Rook. Black should not lose, although the defensive task is beset with difficulty, chiefly that there is no counterplay.

28. Kf2 Ke8 29. Ke2 g6 30. Nc3 a6 (Note the relative security of Black's pawns in contrast to the previous game.) **31. Na4 Rc6 32. Rh1 Bd6 33. Bf2 Nd7 34. g4** (The only reasonable pawn break; preparing b3-b4 would merely lead to the exchange of Black's weakling.) **hxg4 35. Rh8† Ke7 36. fxg4 g5 37. Be3 f6 38. Nc3 Kf7 39. Rh7† Ke8 40. Ne4 Be7 41. Rh6** (Probably more effective was the immediate 41. Bd2 [R. Keene] with the idea of tying the opposing minor pieces to f6 so that a later Rh8† cannot be parried by ...Nf8. In such a case, the Rook would reach its preferred square a7 without allowing the enemy Knight to settle on e5.) **Kf7 42. Rh7† Kf8**

43. Rh8† Kf7 44. Bd2 (According to Keene, 44. Ra8 Ne5 45. Ra7 Ke8 46. Nf2 f5 47. Bd2 Bf6 48. Ba5 Nd7 is probably tenable for Black. So Korchnoi tacks about some more, hoping to provoke Karpov into weakening himself.) **Nf8 45. Rh1 Kg6 46. Rd1 f5 47. Nf2 Bd6 48. Bc3 Nd7 49. gxf5† exf5 50. g4 Nb6 51. Kf3 Be7 52. Ba5 Rf6 53. Kg2 fxg4 54. Nxc4 Re6 55. Kf3 Bf6 56. Nxf6** (Else the Bishop goes to d4.) **Rxf6† 57. Kg4 Nc8 58. Bd8 Rf4† 59. Kg3 Rf5 60. a4** (White is handicapped by having a Bishop of the "wrong" color for his Rook pawn. Black can simplify to a position of B+RP and still draw.) **Kf7 61. Rd3 Re5 62. Kg4 Kg6 63. a5 Re4† 64. Kf3 Rf4†** (Keene gives 64... Kf5 65. Bxg5 Na7 and 65. Rd5† Re5 as drawing. Now the Knight never gets free.) **65. Ke3 Rh4 66. Rd5 Rh3† 67. Kd2 Rxb3 68. Rxc5 Rb8 69. Rc6† Kf5 70. Rxa6 g4 71. Rf6† Ke4 72. Bc7 Rb2† 73. Kc3 Rb7 74. Bh2 Rh7 75. Bb8 Rb7 76. Bg3 Rb1 77. Rf4† Ke3 78. Rf8 Ne7 79. a6, 1-0.**

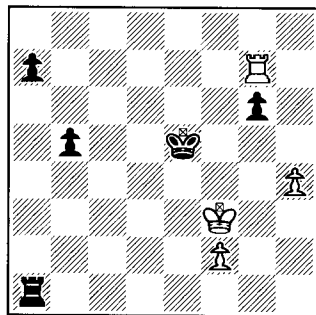
So Karpov need not have lost. The strain was just too much, apparently. Comparing both games once again, the importance of White's active Rook becomes clear. Who would have thought the b3-pawn (in Korchnoi—Karpov) could reduce White's winning chances? But when you consider Alekhine's maneuver in the other game, such a difference is almost obvious. Simply playing through a series of similar games helps you understand them; closer analysis brings many subtleties to light.

Typical Positions, Experience, and Planning

As already mentioned, the endgame books contain typical positions from the main categories: Rook and Pawn, Bishop versus Knight, and so on. Over the board, knowledge of basic endings determines in part the depth of your planning. For instance, a novice knowing that two Bishops can force mate

might mistakenly play for the drawn position K+2N versus K. Admittedly primitive, this example makes the point: unless you know what is advantageous (especially where exchanges irrevocably alter the balance) in the ending, your planning is vague and hesitant.

To give a more positive instance of endgame knowledge, let's turn to the famous game *Botvinnik—Fischer, Varna 1962*.



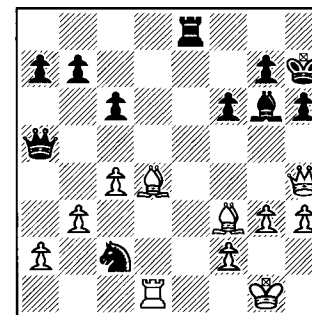
The World Champion is aware that the basic ending R+2 Rook pawns versus Rook is generally a draw if one pawn is blocked by the defender's King and the other is attacked from behind. Hence Botvinnik's problem is to destroy the b-pawn.

52. h5 Ra3† 53. Kg2 gxh5 54. Rg5† Kd6 55. Rxb5 h4 56. f4 Kc6 57. Rb8 h3† 58. Kh2 a5 59. f5 Kc7 60. Rb5 Kd6 61. f6 Ke6 62. Rb6† Kf7 63. Ra6 Kg6 64. Rc6 a4 65. Ra6 Kf7 66. Rc6 Rd3 67. Ra6 a3 68. Kg1, 1/2-1/2.*

Consider for a moment the confusion White would have faced if he lacked basic endgame knowledge. He would have had to either guess which setup of pawns was best or rely solely on over-the-board calculation. Neither choice is appealing because of the uncertainty. No, in such endings, experience and theoretical study must be used with calculation to ensure success.

* [Ed. Note: Further information about Geller's input and Botvinnik's thoughts may be found in Botvinnik's *Achieving the Aim*.]

Facing *Smyslov* (Black) in the *1951 USSR Championship*, *Keres* relies on his experience to reach a winning position. He overlooks a sharp chance to dispatch Smyslov, but this error highlights the value of intuition and knowledge: knowing the simple endgame is won, Keres steers "unerringly" for it, ignoring, because of time pressure, some quicker, more complicated solutions.



Black's plan aims for a light-square Bishop ending that is won because White's queenside pawns are weak and Black's King can invade. The procedure is straightforward and schematic. First, by attacking the queenside pawns he ties down the enemy Bishop. Second, his King advances to the center. Third, after effecting a pawn exchange on the kingside, Black puts White in *zugzwang*. Fourth, the King invades on the flank, winning material.

Again, the winning scheme for Black is commonly known. His problem over the board is twofold: 1) can the book endgame be reached? 2) is the ending really won using the standard scheme? For instance, even if the white Bishop can be tied down, the whole plan is useless if Black's King is unable to break through. Keres must see the entire process before trading down to the endgame.

In the diagram, 30... c5 wins for Black. Keres gives:

1) 31. Bxf6 Re1† 32. Kh2 (32. Kg2 Ne3†) Rxd1 33. Bxd1 Qd2;

2) 31. Bb2 Re1† 32. Rxe1 Qxe1† 33. Kg2 Bd3 34. g4 Ne3† 35. Kh2 g5. Instead, the previously described ending arose.

30... Re1† 31. Rxe1 Qxe1† 32. Kh2 (32. Kg2 Qd2) **b6** (Again, 32... c5 33. Bxc5 b6 34. Bd4 Qd2 is faster.) **33. Qf4 c5 34. Be3 Nxe3 35. Qxe3 Qxe3 36. fxe3 Bb1 37. a3 a5 38. Bd1 Kg6 39. Kg2 Kf5 40. Kf3 Ke5** (White can only move his King. Black intends “phase three,” the pawn-roll ...g5, ...f5, ...f4, opening the royal road to d4 and f4.) **41. a4 g5 42. Ke2 Bf5 43. g4 Bb1 44. Kf3 f5 45. gxf5 Kxf5 46. Kf2 Be4 47. Kg3 Kg6 48. Kf2** (Keres notes 48. h4 h5 49. Kh3 Bd3 50. Kg3 with ...Bf5 zugzwang.) **h5 49. Kg3 h4† 50. Kf2 Bf5 51. Kg2 Kf6 52. Kh2 Ke6** (Now 53. Kg2 Ke5 54. Kh2 Bb1 55. Kg2 Ke4 56. Kf2 Kd3 wins, so ...), **0-1**.

Now retrace Black’s reasoning from the diagram and try to foresee the basic endgame. The idea is analogous to the tactical tracing we did earlier; try to hold Black’s strategic line of play in mind.

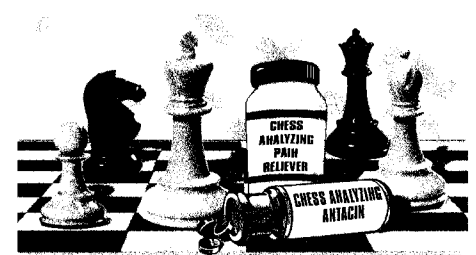
To summarize this chapter:

Intuition develops from repeated experiences. Learning from those experiences and drawing correct conclusions helps refine your judgment. In order to concentrate and accelerate this **refinement**, learn to focus on specific problems that obstruct your progress. Set a definite goal for each study session. Master a particular attacking technique or study the situations that favor the isolated Queen’s pawn, for instance. After you explore the position, look at it again to see how your strategic judgment has changed. A thorough analysis should have produced a fresher, more accurate impression of the position.

3: Preparing to Analyze

In the art of chess, there are no unalterable laws governing the struggle which are appropriate to every position; otherwise, chess would lose its attractiveness and eternal character.

— Vassily Smyslov



Analysis has certain prerequisites. We have already covered two vital skills (in outline) that precede any calculation at the board — foresight and judgment. Two other techniques are explained in this chapter: 1) how to avoid vague thinking and play by general principles, and 2) how to order your search for moves, beginning with the sharpest ideas, to swiftly reach the heart of a position.

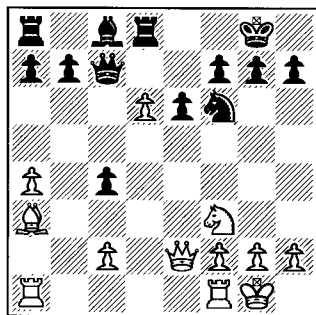
The first section, **Linking the General and the Specific**, examines the relation between specific variations and the general principles that describe a position. The idea is to encourage a critical analysis of unsupported assumptions, delaying your final judgment when necessary until the evidence arrives.

Our second section, **The Threat Hierarchy**, proposes a technique for looking at the most significant themes. Essentially, this guideline suggests that you search for the strongest conceivable threats to gauge the relative sharpness of the position. Experience shows that it’s easier to first refute over-sharp plans before proceeding to analyze “natural” ideas.

Linking the General and the Specific

In the diagrammed position (*Lilienthal—Boleslavsky, USSR 1941*), White has just played 17. d5-d6. In notes to similar games we read comments such as “this pawn cuts Black’s

position in two” or “White’s pawn thrust smothers the opponent.”



With statements like these, the annotators summarize their positional judgment. Rather than present lengthy variations as proof (which for many reasons is often difficult), they merely indicate conclusions. Serious readers then know where to investigate, casual readers know what is happening, and editors save space.

Let’s now see the game continuation:

17... Qa5 (17... Qc6 18. Ne5 Qxa4 19. d7 Nxd7 20. Be7 Qb5 21. Nxf7 Re8 22. Nd6) **18. Qxc4 Bd7 19. Qh4 Bc6 20. Bb4 Qf5 21. Nd4 Qd5 22. Nxc6 Qxc6 23. Ra3 a5 24. Bc3** (24. Rg3 Ne4 25. Rh3 h6) **Ne8 25. Bxa5 Rxd6** with advantage to Black. White has weak pawns and no attack. **26. Bb4 Rd7 27. Bc3 Rad8 28. h3 Rd1 29. Ra1 Rxf1† 30. Rxf1 Rc8 31. Bd2 Nf6 32. a5 Qd5 33. Qb4 h6** (33... Rxc2 34. a6) **34. Rb1 Ne4 35. Be3 Nd6 36. Qa4 Nc4 37. Bb6 Rc6 38. c3 f5 39. Rd1 Qe5 40. Rb1** (40. Qb4) **Qxc3 41. Bd8 Nd2 42. Rd1 Qd3 43. Bb6 Rc4 44. Qa1 f4 45. Kh2 Kh7 46. Re1 Re4 47. Rxe4 Qxe4 48. a6 bxa6 49. Qxa6 Qb1 50. g4, 0-1.**

A confusing game. In his annotations, Mikhail Botvinnik mentioned no major improvements for White. Apparently, the strong pawn conferred no advantage. So White’s bind never

existed? To answer this riddle, we must look into the relationship between particular chess positions and the generalizations used to describe them.

Many things are happening in the diagrammed position above. Starting with points favoring White, we list an advanced pawn, lead in development, and capture on c4 restoring material equality. Black’s assets include a compact pawn position and pawn targets (a4, c2) in the ending. The analyst must weigh these compensating advantages to determine which are most important.

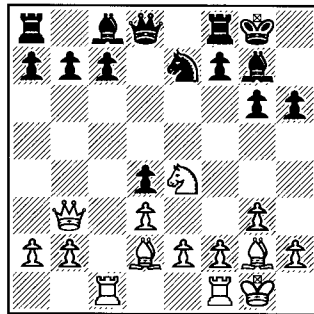
In the first parenthetical note (beginning 17... Qc6 18. Ne5), Black attempts to avoid the weak a4-pawn at once. The resulting line demonstrates White’s potential: the lead in development and the advanced pawn combine to refute 17... Qc6. Instead, Boleslavsky chose to catch up in development. Lilienthal regained the pawn, but remained with no attack. He was forced to exchange his active Knight and enter an inferior endgame. Finally, only Black’s structural plusses were left. In keeping with the prime tenet of positional play, Boleslavsky maintained those elements favorable to himself while neutralizing those useful to the opponent.

Returning to the opening comments about the strength of d6, we see that Black wasn’t cut in half. His game was nicely coordinated, not smothered. Fairly simple analysis revealed the inaccuracy of these offhand conclusions. Yet a grandmaster misread the position, overestimating the strength of the pawn. (To be fair, Botvinnik’s notes indicate that the diagrammed position does favor Black.)

The problem of valuation centers on the linkage of specific variations with generalizations. Perhaps Lilienthal assumed that he could build up a kingside attack before Black’s reinforcements arrived. Perhaps in his calculations he overlooked something. Whatever the cause, the point is clear: the only sure way to verify a generalization is to examine the lines that support it.

The next game is a clear example of general play met with sharp tactics (*Hübner—Korchnoi, Solingen 1973*):

1. Nf3 Nf6 2. c4 g6 3. Nc3 d5 4. cxd5 Nxd5 5. g3 Bg7 6. Bg2 e5 7. 0-0 Ne7 8. d3 Nbc6 9. Bd2 0-0 10. Rc1 Nd4 11. Nxd4 exd4 12. Ne4 h6 13. Qb3.



White starts a thematic queenside attack. He has open lines and several active pieces in that sector — promising a mild initiative at least. Korchnoi replied **13... b6**, an extraordinarily provocative move based on a simple idea. Try to find the point of this move before proceeding.

Obviously Hübner thought that his Queen, g2-Bishop, and Knight (Ne4-c5) converging on b7 would force a passive move like 13... c6. We have all seen similar attacks succeed; but here, the “weakness” simply moves! Korchnoi calculated and found that White’s general scheme had a flaw — the Queen is unsafe on b3:

1) 14. Nf6† Bxf6 15. Bxa8 Be6 16. Qa3 Qxa8 and the N/e7 cannot be touched;

2) 14. Nc5 bxc5 15. Bxa8 Be6 with ...Qxa8 to follow.

The alert reader will note there are no quiet Knight moves on White’s 14th; the Knight must be sacrificed to get at the Rook.

Black’s strategy with 13... b6 (actually starting a little earlier) is to repel the spurious attack while gaining space queenside. Then his development is easy, and further advances are possible. The game continued:

14. Qc4 c6 15. Bb4 Bd7 16. Qa6 c5 17. Ba3

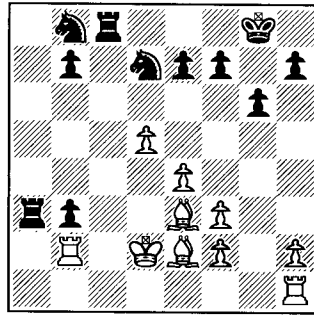
Bc8 18. Qa4 a5 19. Qc2 (Mission accomplished?) **Nd5 20. Rce1 Re8 21. b3 Ra7** (The Rook is finally persuaded to move, not from fear but in search of opportunity) **22. Bb2 Rae7 23. Qd1 f5 24. Nd2 b5 25. Bxd5† Qxd5 26. f3 a4** and Black won in 72 moves.

Korchnoi evidently discovered 13... b6 because he noticed that his Queen could be unmasked if the c8-Bishop moved with sufficient threat; Bc8-e6 attacked the Queen, giving White no time to save his Bishop. It only remained for Korchnoi to examine possible counterthreats such as 16. Qa3-17. Qxe7 and determine their inadequacy. Only after finding this last point could one confidently state “White’s Queen is unsafe,” as if the fact were obvious.

When annotators give general conclusions without accompanying analysis, the reader is often misled: it appears that intuitive judgment alone solved the problem. The truth is that the generalization is probably the result of some tactical analysis — assuming that the annotations are done competently. Following exploration of the tactics, the commentator looks for a common thread that links them, using phrases such as “the Knight is misplaced” or “the pawn is weak.” With the position solved, a bare-bones assessment is all the reader may get.

In practical play, many planning decisions begin with a general idea which is then corroborated with specific lines. Your intuition suggests a move, and you analyze it. If you are writing annotations, the phrase “Black is lost” may be the only part of the analysis that gets printed. In any case, failure to procure the tactical evidence can easily result in vigorous defense of an unsound strategy.

An interesting dispute arose around the evaluation of the following position (*Euwe—Smyslov, World Championship 1948*):



Paul Keres, in the tournament book, upheld the supremacy of White's game because of the famous two Bishops. Along with Euwe, he believed that the b3-pawn would be won back with good prospects. The battle continued:

21... Na6 22. Rhb1 Nac5 23. Bd4 (Smyslov demonstrates the pawn's vitality, giving two possibilities: 1) 23. Bb5 Ne5 24. Bxc5 Rxc5 25. Rxb3 Nxf3† 26. Ke3 Rxb5 27. Rxa3 Rxb1 28. Kxf3 f6 29. Rc3 h5 30. Rc7 Kf8 with winning chances; 2) 23. Bd1 Ra2 24. Rxa2 bxa2 25. Ra1 Ra8 26. Kc3 e6 27. dxe6 fxe6 28. Bc2 b6 29. Kb2 Ne5 with advantage.) **e5 24. dxe6** (Here Keres recommends 24. Be3 f5 25. exf5 gxf5 26. d6, to which Smyslov adds 26... f4 27. Bc4† Kg7 28. Bxc5 Rxc5 29. Bxb3 Rc6 winning the d-pawn. After 24. Bc3, White has similar problems.) **Nxe6 25. Be3 Ndc5 26. Bxc5** (Keres still assumes ecclesiastic superiority with 26. Bc4, seemingly overlooking Smyslov's winning 26... Nxe4† 27. fxe4 Rxc4 28. Kd3 Rb4 29. f3 f5 30. Kc3 Rb5 31. exf5 gxf5 32. Rxb3 Rxb3† 33. Rxb3 Rxb3† 34. Kxb3 f4 35. Bd2 Kf7, heading for f5.)

The spell of the two Bishops led to an inaccurate assessment by Keres and Euwe. Smyslov analyzed, valued rightly, and won.

26... Nxc5 27. Kc3 Ra4 28. Kd2 Kg7 29. Ke3 Rd8 30. Rc1 b6 31. Bc4 Rda8 32. Bd5 Ra2 33.

Rcb1 R8a4 34. Kd2 Rd4† 35. Ke2 Na4 36. Rxa2 bxa2 37. Ra1 (37. Bxa2 Nc3† 38. Ke3 Ra4 39. Bb3 Ra3 — Smyslov) **Nc3† 38. Ke3 Rd1, 0-1.**

If you run across a generalization, either in written notes or as a result of your judgment, try to find specific variations that support the idea. For instance, if some game notes state that a certain pawn sacrifice gains the initiative, analyze several lines to verify the claim. Retrace the annotator's work and judge his conclusions. You may find varying degrees of support, ranging from complete acceptance to rejection. Underlying variations are needed, for unsupported generalizations may be suspect.

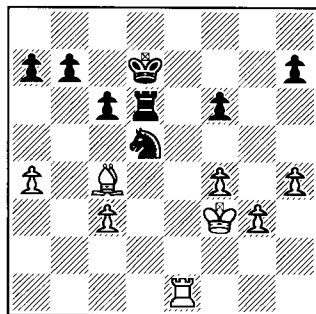
The Threat Hierarchy

Rapid calculation depends in part on an orderly study of the threats in a position. Just as pieces are ranked according to their value, threats can be arranged hierarchically. When you study a position, the first task is to find any immediate dangers. Does either side win outright? If the player to move can force mate, everything else is irrelevant. Similarly, from an otherwise equal position, winning a piece is overwhelming. Less compelling, although usually decisive, is winning a pawn or the Exchange. Next on the hierarchy are less immediate positional threats such as gaining space, disarranging opposing pawns, creating passed pawns, and so on. Of course, some positional threats are worth considerable material — no clear line divides material from positional danger. The ranking criterion is the threat's severity.

By ranking the threats, strongest to weakest, you discover where the critical battle will be fought. For instance, you pass over a hanging pawn in your calculations if there is any *chance* of mate for either side. Only after assuring yourself there is nothing better should you analyze the pawn win. Thus no time is lost. The most dangerous ideas are always checked first, and found wanting, before any minor threat is even considered.

Contrary to ideas held by some amateurs, the expert looks at mating attacks and material threats carefully before embarking on any positional maneuver. Nobody tacks about when victory is in sight. Instead, the master finds the sharpest idea available, then begins to evaluate plans and calculate variations. He abhors analysis that fails to consider a significant threat. Your analysis, too, must be based on knowledge of the most powerful plans.

The top-down search for threats catches sharp moves and helps ensure against surprise. Let's take a simple example.



No mates or similar terrors are apparent in *Alekhine—Euwe, Game 2, 1937*. Black has one material threat, 32... Nxc3, but in general his game is rather passive: his Rook attacks nothing, his pawn majority cannot rapidly advance, and his kingside is vulnerable.

White to move looks at 32. Bxd5 and 32. Rc1. Frown. The first gives up a nice Bishop, the second tethers the Rook. What about counterattack? If the c3-pawn burdens White, perhaps some aggressive move exists, something worth at least a pawn. Seeking to even the match score, Alekhine needs to find the best winning chance.

Black's kingside invites attack by Bc4-d3, Kf3-g4-h5, and g3-g4-g5, or some such general advance. Plowing ahead with g4-g5 might work, although the pawns lack support. Black could play ...h7-h6 and force the exchange of two pawns after g4-g5. White's remaining pawn could be vulnerable. We start with the direct **32. Bd3**, hoping for 32... Nxc3 33. Bxh7 and the march of the h-pawn. Clearly, White's infantry moves faster

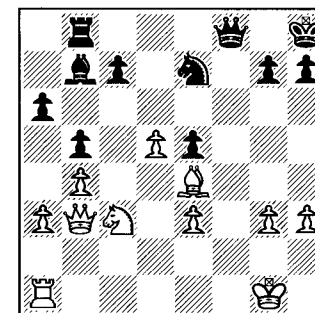
than Black's. After 32. Bd3, ...h7-h5 is useless because of 33. Bg6; hence, **32... h6** is forced.

Now White sees that 33. Kg4 Ne7 34. Kh5 f5 is messy. So **33. Bf5†** comes first, and after **33... Kd8, 34. Kg4**. If now 34... Nxc3, White's pawns are again faster: 35. Kh5 Nxa4 36. Kxh6. The Bishop operates on both sides of the board, and Black's King is denied transit on the e-file. Therefore, Euwe played **34... Ne7** and **resigned** after **35. Bb1 Ke8** (35... Rd5 36. f5) **36. Kh5 Kf7 37. Ba2† Kf8 38. Kxh6 Rd2** (Alekhine gives 38... Nf5† 39. Kg6 Nxg3 40. f5 with 41. h5 to follow.) **39. Be6 Rd3 40. g4 Rxc3 41. g5**.

In this example, Alekhine saw that his attack was stronger than the c3 threat. Returning to the diagram, it is easy to see that 32. Bxd5 or 32. Rc1 would be irrelevant and lacking initiative. For example, 32. Rc1 Nb6 33. Bb3 Rd3† gives counterplay. Alekhine foresaw his kingside attack and had no intention of holding c3; he worked out the winning idea before reaching the ending.

Once you have discerned a threat for either side, create a plan to parry (or execute) it. *Normally, an attack comprises several tactical threats*. So when your position offers such chances, you first search for ways to incorporate separate threats into your strategy. Try to group the individual threats, executing them simultaneously if possible. Multiple attacks can more easily overwhelm the defense.

To show how ranking threats can aid planning, we turn to the game *Byrne—Portisch, San Antonio 1972*:



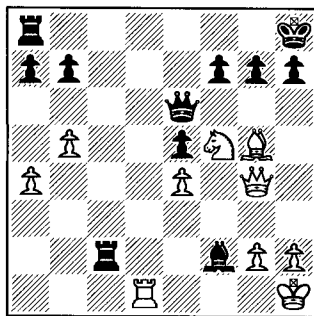
Several pieces are clustered around d5, indicating the value of that point. Black-to-move seeks an aggressive idea. A quick glance reveals that the d5-pawn is inedible: 21... Rd8 22. d6. This thrust alerts Black to the danger. If he tries to post his Queen actively, he's in for a shock: 21... Qf6 22. d6 cxd6 (22... Qxd6 23. Bxb7 Rxb7 24. Rd1) 23. Bxb7 Rxb7 24. Rf1. Obviously, White owns a lively pawn.

The conclusion: Black should cover his back rank to neutralize the d5-d6 advance. He can try ...Nc8-d6 or, as in the game, Ng8-f6 with Qf8-d6. The finalé is now understandable.

**21... Ng8 22. Bg2 Nf6 23. e4 Qd6 24. Kh2 h6
25. Qb2 Rf8 26. Qe2 Qb6 27. Rf1 Bc8 28. Rf3
Bd7 29. Nd1 Re8 30. Nf2 a5 31. Qb2 axb4 32.
axb4 Qd6, 1/2-1/2.**

The ineffectiveness of natural moves told Black to beware. Look at the diagrammed position once more: did you guess that White's threats were so dangerous?

Finding and evaluating threats is essential to defensive play. You must know your weak points and the precise strength of the enemy attack. Only then can you plan your defense. Discover the threat first, then decide what to do. Facing Castaldi (Black) in the 1937 Stockholm tournament, World Champion Euwe handled the problems of defense skillfully:



Although it is Black's move, the defender finds threats by assuming that the attacker has the move. Black must see what

troubles loom ahead and what happens if he does nothing. In the diagram, g7 is a likely target, assailed by three pieces. A reasonable move is 32. Bh6, forcing 32... g6. The follow-up could be 33. Rd6 Qc4 (or 33... Qe8 34. Qg5) 34. Qd1 with back-rank mates in the offing. Also, 32. Rd6 immediately promises a strong attack. As a rule, you should examine attacking moves in varying orders to exhaust the possibilities. Simple transpositions often make a surprising difference.

Looking closer, we find that 32. Bh6 relies on 33. Rd6 to intensify the attack. Without the Rook incursion, White's plan is more annoying than lethal. Hence, Black must either stop the Rook move or neutralize its effect. Line blocking with 31... Bd4 suggests itself; then 32. Bh6 g6 33. Qg5 Re2 is safe enough. The combination 31... Rac8 32. Rd6 Qxd6 also suffices. With 31... Rac8, Black aims to swap Rooks (protecting his back row) and prepare a kingside attack.

Before turning to the game continuation, let's consider some unsuccessful ideas that highlight the defender's plight. From the diagram, Euwe gives:

- 1) 31... g6 32. Nh6 Kg7 (32... Qxg4 33. Bf6#) 33. Qxe6 fxe6 34. Rd7†;
- 2) 31... Rg8 32. Nh6 gxh6 33. Qxe6 fxe6 34. Bf6† mates;
- 3) 31... f6 32. Bh6 g6 33. Bg7† Kg8 34. Nh6†.

These variations illustrate an old rule of defense: *unless required, don't advance pawns in front of the King*. The only common exception occurs when the advance is part of a plan to gain the initiative. For instance, the pin-breaking sequence 1. h2-h3 Bh5 2. g2-g4, freeing an f3-Knight.

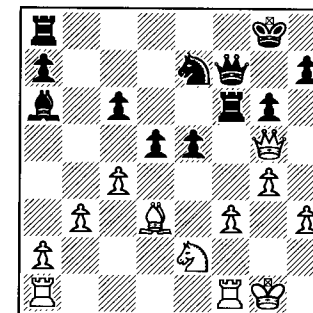
Euwe played **31... Rac8** but still faced some discomfort: **32. Bh6 g6 33. Qg5 Bd4 34. Bg7† Kg8 35. Bf6 R2c7 36. h4** (examine 36. Be7 Be3 and 36. Rf1 Qc4) **Bc5 37. Nh6† Kf8 38. Rd5 Be3 39. Qxe3 Qxf6 40. g3 Qf1†** (41. Kh2 Rc1), **0-1**.

Black's first problem in that game was to determine White's

attacking idea. The threat to g7 wasn't decisive, but the Rook move threatened to drive Euwe's Queen from the defense. Therefore, the primary danger had to be dealt with immediately. Black's choices were ...Bd4 and ...Rac8; Euwe played the more aggressive Rook move.

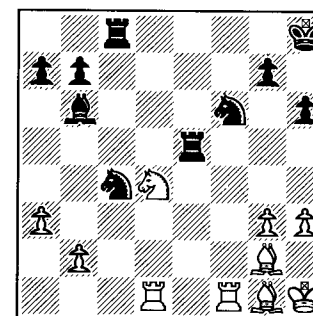
Remember that in defense the analytic process *always* starts by evaluating the opponent's threats, even if the defender is on the move. Simply assume your adversary has the move and try to find a threat for him. After discovering the attacking plan, a counterplan can be devised that answers any threats and prepares to take over the initiative.

EXERCISES



DESCRIBE: How the threats to e5 (for White) and f3 (for Black) guide the play. Give variations.

ANSWER: From *Tal—Keres, Latvia/Estonia 1954*: White's threat to e5 cannot be parried directly. For instance, 24... Qe6 25. Nc3 Raf8 26. cxd5 cxd5 27. Bxa6 Qxa6 28. Qxe5 is equal. Swapping e5 for f3 is also fruitless: 24... Rxf3 25. Rxf3 Qxf3 26. Rf1 Qxd3 27. Qxe7 with at least a draw. And 24... Raf8 25. Qxe5 Rxf3 26. Nd4 is weak. The weaklings on e5 and f3 cancel out, so Black creates another target, c4. Keres played **24... dxc4 25. Bxc4** (or bxc4 Rd8) **Bxc4 26. bxc4 Rf8 27. Qxe5 Re6 28. Qh2 Re3 29. Ng3 Qxc4**. Now f3 remains: **30. Ne4 Qd4 31. Rad1 Rd3† 32. Nf2 Rxf3** and **0-1** in 43 moves.

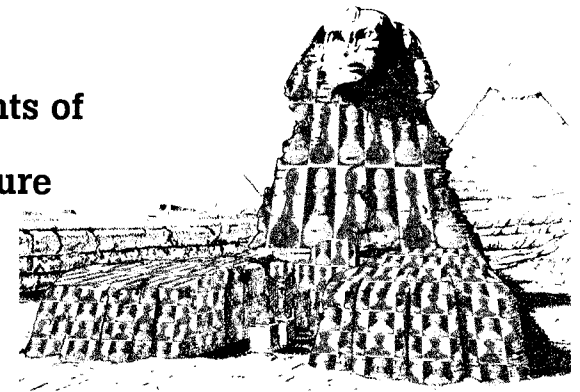


FIND: White's strongest threat.

ANSWER: From *Smyslov—Kasparov, Vilnius 1984*: Black's line-up on the c-file suggests 27. Rc1. Makarichev gives 27... Ne4

28. Rfd1 Nxb3† 29. Kh2 Ne2 30. Nxe2 Rxe2 31. Bxb6 axb6
 32. b3 winning; and 27... Rc7 28. Nc6 with good chances to
 win. The finish saw Kasparov escape: **27. Bxb7 Rc7 28.**
Rc1 Nxb2 29. Rxc7 Bxc7 30. Nc6 Re2 31. Nd4 Re5
32. Nf5 Bb6 33. Nxb6 Ra5 34. Bxb6 axb6 35. Nf5
Rxa3 36. Kh2 Nc4 37. g4 Ra7 38. Bh1 Ne5 39. g5
Nh5 40. Re1 Ra5, 1/2-1/2.

4: The Elements of Planning Pawn Structure



In any book on strategy, you can find a list of elements covering various pieces and pawn configurations, along with detailed examples. Because analysis consists basically of variations, breaking a position into the separate strategic elements for study risks inaccuracy. No analyst judges a position solely by weighing formal elements. Instead, he notices, say, a backward pawn, decides which attack or maneuver is promising, and then finds lines of play to vindicate his impression. He combines all available evidence without caring particularly what category it comes from.

Nevertheless, taking positional themes separately seems the only way to clearly convey the scope of analysis. So, following convention, we will in turn consider the basic elements of planning — pawn structure, placement of the pieces, and open lines. The inclusion of open lines into such a fundamental grouping may look odd, but the linkage of strategy and tactics requires plenty of practice. And I have found that this can be aided by seeing specifically how lines are used. Hence the formal presentation of lines as a topic.

The pawn position tells us a great deal about the prospects for both sides. Among other things, the pawns indicate which King is safer, who has more space, which squares are likely outposts, and which endgames can easily arise. The pawns count for so much because they are the most permanent feature on the board. Most long-term positional advantages are based on superior pawn structure. Misplaced or threatened pieces can be withdrawn, but the pawns' limited range en-

sure a certain stability — a clear benefit to accurate planning, for we can rely on what is permanent.

Let's now consider the major topics: 1) weak pawns and weak squares, 2) pawn breaks, and 3) passed pawns. We examine these with over-the-board planning in mind.

Weak Pawns, Weak Squares

The idea of a weak square stems from Steinitz. Simply put, *a weak square is one that can be exploited*. The description normally applies to squares within the “victim's” half of the board. Generally, there are two kinds of weaknesses:

- 1) a hole in the pawn structure (that is, a square which can no longer be protected by pawns);
- 2) a square subject to overwhelming, often sacrificial pressure.

You may begin your search for ideas by looking for weak squares. Sometimes the weakness appears in the opening; you can then arrange your development accordingly. Observe in the next game the relentless exploitation of c4 (*Donner—Fischer, Santa Monica, 1966*). The innocent fianchetto of White's Bishop weakens that square, and later Donner forgets this, preferring instead to forge ahead with 10. b4. Fischer's campaign is based on simple, classical logic.

1. d4 Nf6 2. c4 g6 3. g3 Bg7 4. Bg2 0-0 5. Nc3 d6 6. Nf3 Nbd7 7. 0-0 e5 8. e4 c6 9. Rb1 (A better plan, indicated by Donner, is to play 9. Re1, waiting to develop with Bf4 after e5xd4. 10. Rb1 should only be played to discourage ...Qb6 or ...Qa5 with the reply b2-b4.) **a6 10. b4** (Often seen in the English opening, this plan fails because of Black's strong central pressure.) **exd4 11. Nxd4 Re8 12. h3 Ne5 13. Qe2 b5 14. cxb5 cxb5** (Much more useful than 14... axb5.) **15. Rd1 Bb7 16. f4 Nc4 17. Qd3 Rc8 18. Kh2 Qc7 19. Rb3 Re7 20. Re1 Rce8 21. Nc2 Qc8 22. Ne3 Nxe3 23. Rxe3 Nxe4 24. Bxe4**

Bxe4 25. Qxd6 Rd7 26. Qc5 Rc7 27. Nxe4 Rxc5 28. Nxc5 Bd4, 0-1.

It is worth pointing out that the weakening of c4 was eventually decisive because White got nothing in return for his concession. While Fischer aimed single-mindedly to occupy the hole, Donner's plan produced no threats. Note in particular Black's tenth move, which drew White's Knight away from e5 and c4. The follow-up pressure on e4 and the c-file gave Donner no chances.

Evaluating Pawn Positions

A serious problem in evaluating pawn positions arises when you come under attack. How do you decide which points are worth defending? And if you must concede something, what method governs your choice of moves?

A defender can often choose among weaknesses to accept. Three basic criteria for the decision are:

- 1) the consequences of capture or occupation of the weakness;
- 2) the defensibility of the weakness; and
- 3) the compensation that is available.

First, when faced with an unclear defensive task, *analyze the consequences of doing nothing* — carefully assess the threats. If the opponent must concede something in order to take a pawn or control a square, perhaps he has no genuine threat. In that case, you hardly want to play a protective move.

The tournament situation and the opponent's style can be considered in your calculation. Someone who dislikes defense will not often seize a pawn tainted by counterattack. But if the threat to your game is real, deduce its strength from the tactical lines you've worked out.

Second, *analyze a direct defense of the weakness* (if needed). The defense should be economical, for unnecessary moves lead to passivity. Select a scheme that is as active as possible, that allows counterchances without being foolhardy. If passive play is required, examine the resulting position with care: further

threats may be crushing. Weaknesses that are doomed should be surrendered or masked with counterplay before the entire game is spoiled. Know when to jettison ballast to keep the game alive. The time it takes to capture a weak pawn often gives some compensation.

Third, search for compensation to offset the weakness. Compensation may be in material, initiative, or complications. Material is best, of course; a swap rids you of your worry. And naturally you aim to trade your bad pawns for the opponent's good.

A counterinitiative may deter capture of the weakness, or it may compensate for material loss. The initiative can be a king-side attack, the harassment of an exposed piece, or a nettlesome passed pawn — anything roughly equivalent to what you are giving up.

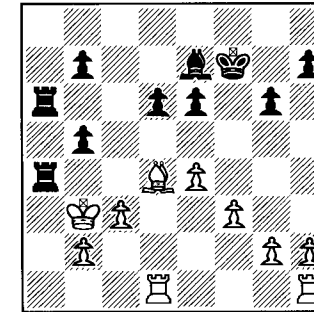
Compensation

The last resort in the realm of compensation is to complicate. Effective threats need not be genuinely dangerous, but they must at least give the opponent fair chances to go wrong. Tailor your play to the adversary: impatient players can often be felled by tactical traps; timid souls should be attacked directly, for they are more likely to retreat and concede something important. Transposing into the endgame frequently lures an opponent into careless thinking — he relaxes because the game is “easily won” (a mistake we avoid, of course). In general, provoking a sudden change in the game's character can be an effective defense. The middle-to-endgame transition is fertile ground for blunder.

To sum up, the need for compensation varies inversely with the resources of defense: strong counterplay (or material plus) is needed to hold together a shattered pawn position, whereas a solid fortress may not demand any significant activity.

The next example illustrates a difficult planning decision. Steinitz must choose between protecting a weak, though apparently tenable, pawn or conceding a hole in the pawn wall to get some counterplay (*Lasker—Steinitz, 9th Game, 1894*). Two points behind in the match, the Champion plays aggressively.

1. e4 e5 2. Nf3 Nc6 3. Bb5 d6 4. Nc3 a6 5. Bc4 Be6 6. Bxe6 fxe6 7. d4 exd4 8. Nxd4 Nxd4 9. Qxd4 Ne7 10. Bg5 Nc6 11. Bxd8 Nxd4 12. 0-0 Nb5 13. Nxb5 axb5 14. Bxc7 Rxa2 15. Bb6 Be7 16. c3 Kf7 17. Kc2 Rha8 18. Kb3 R2a4 19. f3 R8a6 20. Bd4 g6.



Before we weigh the choices facing Black, we look at his problem from White's viewpoint. Lasker has two groups of connected pawns (called “islands”) to Steinitz's three. Fewer islands mean, in general, that the structure is easier to defend. Compare, for instance, Black's unified pawn “continent” in the Benko Gambit to his position here. One set of pawns is virtually self-defending, the other requires constant nursing. In the diagram, the d6-pawn fetters Black, ceding the initiative to White.

All this tells us that an attack must commence on d6. The planner decides how to carry out this attack. A glance reveals that Lasker has three pieces (2R+B) and one pawn that can strike d6. Black may easily guard the point three times as well (K+R+B), and answered e4-e5 with the bypass ...d6-d5.

So the question becomes: what configuration for White can tie down Black to d6 while leaving enough room for a breakthrough or change of front? Lasker plans to double Rooks on the d-file and play his Bishop to g3. Then he may attempt further threats on the kingside.

Why the kingside? Look at the opposing Rooks. They cover the left wing, and because the center is blocked for the mo-

ment, only one theater remains. With his Rook at d3, White can try a later f3-f4, opening the third rank. Another follow-up could be h2-h4-h5, exposing g6 and h7 while preparing to invade along the soft h-file. Black probably would have to withdraw either his Rook (...Ra8) or King (...Kg7) to protect the entry squares. In both cases, d6 would suffer. White can be satisfied that doubling Rooks on the d-file leaves plenty of play once d6 is defended directly.

Steinitz does not like to sit by passively, and he conceives a counterattack. He plays e6-e5 to slow the tempo of White's build-up, hoping to start a minority attack on the kingside (...g5, ...h5, ...g4). The continuation was:

21. Rd3 Ke8 22. Rhd1 e5?! (Now d5 is a weak square. The purely defensive plan consisted of 22... Rc6 23. Bf2 Kd7 24. Bg3 Kc7 25. Rd4 — so far, Fine and Reinfeld's analysis — ...Rca6. Black resists further encroachment at least temporarily. White retains his earlier mentioned options on the kingside.) 23. Be3 Kd7 24. Bc5 Ra1 25. R1d2 (Swapping Rooks makes it easier for Black to defend, because one white Rook cannot attack and guard the hinterland simultaneously. Lasker now aims to use d5 to mop up the isolated, doubled b-pawns.) Ke6 26. Ba3 g5 27. Rd5 Rb6 28. Kb4 g4 29. Ka5 (Lasker's 29. fxe4 is superior: 29... Re1 30. Ka5 Bd8 31. Rxb5 Ra6† 32. Kb4 Rxe4† 33. Kb3.) Ra6† 30. Kxb5 h5 (Here, it seems, his best chance was 30... Rh1, keeping an unruly Rook in White's camp. Black would have serious drawing prospects.) 31. Rd1 Rxd1 32. Rxd1 gxf3 33. gxf3 Ra8 34. Kb6 Rg8 35. Kxb7 Rg2 36. h4 Rh2 37. Kc6 Bxh4 38. Rxd6† Kf7 39. Kd5 Bf6 (Lasker gives 39... Rd2† 40. Kxe5 Bg3† 41. f4 Rxd6 42. Bxd6 h4 43. Bc5 h3 44. Bg1 winning.) 40. Rd7† Kg6 41. Ke6 h4 42. Rd1 h3 43. Rg1† Rg2 44. Rxe2† hxe2 45. Bc5 Bd8 46. b4 Kg5 47. Kd7 Bf6 48. b5 Kf4 49. b6, 1-0.

In his effort to win, Steinitz weakened his pawns, giving Lasker a clear plan of action. Exploiting such gifts is a necessary part of the technique — winning the won game. (Progressively, the improving player learns to work his way backwards from mate, mastering in turn simple combinations, taking advantage of weakness, inflicting weakness, and, finally, seizing a positional edge.)

Avoid Psychological Pressure

Similarly, the defender in such positions should avoid giving in to the psychological pressure that demands activity at any price. In practice, the player under attack usually lashes out, easing the aggressor's task. Try to bear the difficulties and, most importantly, stay alert. Don't let your opponent play cat-and-mouse: meet any move repetitions, for example, with good-humored dourness. Be satisfied with holding your own and making small improvements in your position. *You will be surprised how often a few calm moves can unnerve an attacker who expects to win smoothly.*

Returning to our theme, weak pawns, we examine how such weaknesses are created. Generally, the target pawn that we want to cripple should be relatively important and not readily protected. Place your pieces flexibly, preferably where they help frustrate the opponent's freeing attempts.

In *Spassky—Bronstein, Soviet Zonal 1964*, White aims for a central pawn advance. Black responds with pressure on e4 (to stop the march) and c4 (to seize the initiative). Note how the pawn structure dominates the play. *The permanent features of a game determine the strategy.*

1. d4 Nf6 2. c4 e6 3. Nc3 Bb4 4. Nf3 d6 5. e3 Nbd7 6. Bd2 b6 7. Bd3 Bb7 8. Qc2 e5 9. e4 0-0 10. 0-0 Re8 11. Rae1 Nf8 12. a3 Bxc3 13. Bxc3 Ng6 14. Nd2 Nf4 15. g3 exd4 (Try to figure out why Bronstein exchanges pawns before playing ...Nxd3.) 16. Bxd4 Nxd3 17. Qxd3 Nd7 18. Re3 (Karklins shows that 18. f4 is premature:

...a5 19. b3 Nc5 with e4 pressure.) **Ne5** (Bronstein does not fear the central push, and begins his own queenside play against c4: ...a5-a4, ...Qd7, ...f6, ...Qf7.) **19. Qe2 Qd7 20. f3 a5 21. b3 Rad8** (A shrewd move, intending a later c-pawn advance. After White's next move, 22... a4 is not ripe: 23. b4 c5 24. bxc5 dxc5 25. Bxe5 Rxe5 26. Nb1 Qd4 27. Nc3 — Karklins. Thus Bronstein restrains the white center pawns once more and renews the threat on c4.) **22. Re1 f6 23. Qf1 a4 24. b4 c5 25. Ba1 cxb4 26. axb4 Rc8** (Black's subtle play has nearly succeeded. Spassky regroupes to defend his exposed pawns, and a balance is struck.) **27. b5 Qe6 28. Rc1 f5 29. exf5 Qxf5 30. Bd4 Rf8 31. Rcc3, 1/2-1/2.**

The weaknesses canceled out: f3 and c4 versus b6 and a4. Pawn targets determined where each player set his pieces, typical of a strategic position. Essentially, the stress on pawn play came about because of the conservative opening strategy. No real concessions were made, and this led to a war of maneuver.

Pawn Breaks

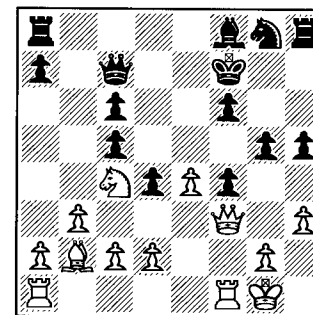
Attack is impossible until files and diagonals are cleared. Pawn breaks (or exchanges) are the principal means of opening lines. These breaks carry such strategic weight that Hans Kmoch, in his classic *Pawn Power in Chess*, called them "levers."

Quite often, the player with more levers than his opponent has the better prospects. He can open lines at will and choose his point of attack. Where the pawns have already been cleared away, levers are less important because the pieces have enough room to maneuver.

To find a feasible pawn break, consider a likely pawn push, then evaluate the resulting position (the hard part) to see if the break is promising. Do your pieces become more active? And are enemy targets exposed by the line clearing? Suppose

the opponent, castled kingside, has played his g-pawn forward one square. You might examine the consequences of pushing your h-pawn (h2-h4-h5xg6). The benefits, opening the h-file and weakening g6, are weighed against the drawbacks, a loss of time and future weaknesses along the g-file. The analyst would concentrate on finding serious counterplay for Black using the two free moves granted by h2-h4 and h4-h5.

In our next example, the defender is so lacking in proper development that the pawn breaks stand out clearly, unsullied by murky counterplay (*Nimzovich—Roselli, Baden Baden, 1925*).



White enjoys five possible levers, an unusually high number. Left to right, we consider *first* b3-b4. This move lacks punch because b4xc5 on the next move is answered simply by ...Bxc5. The *second* lever, c2-c3, ties a defender to d4 and thus must be a serious choice. Our *third* break, e4-e5, obviously threatens to tear Black apart. Three lines open up: d3-g6, f3-c6, and the e-file. The *fourth* lever, g2-g3, practically forces Black to allow gxf4 because f4xg3 clears the f-file for a lethal attack. *Finally*, h3-h4 strikes the support of f4, shaking Black's whole kingside.

So Nimzovich need only choose from this cornucopia. He decides on the sequence c2-c3, e4-e5, h3-h4; observe that this order is vital to White's attack.

18. c3 Rd8 19. Rae1 Ne7 20. e5 Nf5 21. cxd4 Nxd4 (On 21... cxd4, 22. exf6 Kxf6 23. Qe4.) **22. Qe4**

Be7 (If 22... f5, Nimzovich gives the amusing 23. Qb1 Ke6 24. Qd3 and 25. Nd6.) **23. h4 Qd7 24. exf6 Bxf6 25. hxg5, 1-0.** After 25... Bg7 26. Ne5† Bxe5 27. Qxe5, “Black’s King is a pathetic figure in his helplessness.”

— Nimzovich.

Pawn Breaks “Leverage”

Because *pawn breaks determine which lines are opened* (and often who controls them), they influence the prospects for both sides. The player holding a potential break can choose the time to strike, carefully preparing the blow for maximum effect. His massed pieces can then pour through the breach.

In contrast, *the player whose pawn breaks are stymied finds that his pieces lack scope.* The pawns restrict too much of the board. Rooks and Bishops especially suffer from want of space.

In such cases, preventive tactics and watchful maneuver predominate — the defender walks the treacherous line between unsound counterattack and hopeless passivity. Because this sort of defense is difficult, pawn breaks can confer a lasting strategic initiative. The game *Spassky—Geller, Soviet Zonal 1964*, illustrates these points.

1. e4 e5 2. Nf3 Nc6 3. Bb5 a6 4. Ba4 Nf6 5. 0-0 Be7 6. Bxc6 dxc6 7. d3 Nd7 8. Nbd2 0-0 9. Nc4 Bf6 10. Bd2 Re8 11. a4.

Here Spassky could prevent the easy development of Black’s queenside by 11. Bc3, stabling the N/d7 to e5. The natural follow-up, based on the pawn position, could be 12. h3 and 13. Nh2-g4, attacking the kingside. White need not fear b7-b5 because of Nc4-a5 in reply. After 11. a4, Geller completes his deployment and sets out to pressure the dark squares d4 and f4.

11... Nf8 12. a5 b5 13. Ne3 c5.

Black now eyes d4 for his Knight. This long-range plan is

feasible because White is passive, having no points to attack and no pawn breaks.

14. b3 Be6 15. Bc3 Ng6 16. Nd2 Qd7 17. g3 Bh3.

This Bishop post stifles Spassky’s f-file counterplay (f2-f4xe5). And a later pawn push to f5 followed by g4-g5 is thwarted, consigning White to defense across the board.

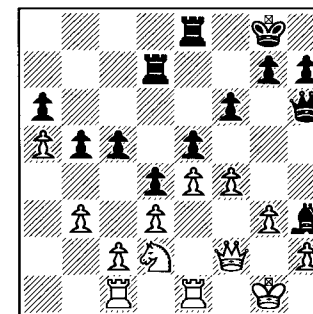
18. Ng2 Be7 19. Re1 Rad8 20. Ne3 Bg5 21. Qf3 f6 22. Qe2 Nf8 23. f3 Ne6 24. Qf2 Nd4 25. Ndf1 Qf7.

Geller wants to ossify White’s kingside with the threat 26... Qh5, forcing 27. g4.

26. f4 Bh6 27. Bxd4.

On 27. fxe5 fxe5 28. Qxf7† Kxf7 29. Bxd4 cxd4 30. Nd5 Rd7 the Knights crave open space, while Black still holds his c5-c4 breakthrough and f-file pressure as trumps.

27... cxd4 28. Nf5 Qg6 29. Nxh6† Qxh6 30. Nd2 c5 31. Rac1 Rd7.



With enemy counterplay neutralized, the advance c5-c4 becomes visible. Executing this required doubled Rooks and maybe the Bishop at e6. Spassky finally rids himself of the

terrible Bishop and hopes to find a haven in the heavy-piece ending.

32. Qf3 Qg6 33. f5 Qg5 34. Qf2 Rc8 35. Kh1 Rdc7 36. c3.

The kingside attempt with 36. Rg1 is smothered by 36... Bg4 37. Rgf1 Rc6 and 38... g6 (according to Karklins). And if 36. Nf3, then 36... Qh5 37. Ng1 c4. Therefore, Spassky wants to attack c5 and get some air for his Rooks, which haven't had a breath in hours. If he can place a Rook in Black's backyard, real counterplay will develop.

36... dxc3 37. Rxc3 Rd8 38. Nf3 Qg4 39. Ng1 h5 40. Nxh3 Qxh3 41. Qe2.

On 41. Rxc5 Rxc5 42. Qxc5 Rxd3 and 43... Rd2, Black wins. Geller intends to swap White's active Queen (...Qg4), then harvest the pawns. The surprise capture on Move 46 is absolutely typical.

41... Rd4 42. Kg1 Kh7 43. Rec1 Rcd7 44. Rd1 Qg4 45. Qxg4 hxg4 46. Rxc5 Rxe4 47. Kf2 Rb4 48. Rc3 Kh6 49. Ke3 Kg5 50. Rc6 Rxb3 51. Rxa6 Kxf5 52. Rb6 Ra7 53. Rf1† Kg6 54. Ra1 Rd7 55. Rd1 Rd4 56. a6 Ra4 57. Rd2 Rba3 58. Rxb5 Rxa6 59. Rb4 R6a4 60. Rbb2 Kg5 61. Ke2 g6, 0-1.

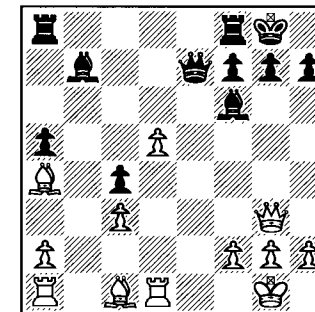
Passed Pawns

An important element in pawn play is the passed pawn. The overpowering potential of the "passer" (to use another Knoch term) commands respect, and it can easily dominate the game's strategy. Even if promotion is denied, the passed pawn's value as a *decoy* makes a defender loath to commit himself elsewhere. Similarly, a timely passer is an excellent means of cooling an attacker's ardor.

For these reasons, when a passed pawn appears, you must assess its impact in much the same way you would check to see whether the two Bishops constitute a plus in a given position. The possibility of blockade and capture creates some risk to the owner of a passed pawn. A blocked advanced pawn may often become a fatal weakness. In this sense, the pawn serves to sharpen the game, producing risk for both sides.

The Passer's Power

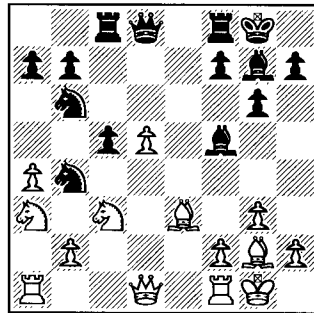
On occasion, a passer is so powerful, its path has been prepared so well, that coronation must be stopped by sacrifices. We witness a rare, if well-known, instance (*Smyslov—Keres, Zürich 1953*). The score is given without notes, and you may like to play through the game twice. The first time, just note the scheme which sweeps all obstacles from the pawn's path. On the second time through, try to analyze tactically, looking for alternatives.



22. Bf4 Rfd8 23. d6 Qe4 24. Re1 Qf5 25. d7 h5 26. Re8† Kh7 27. h4 Ra6 28. Bg5 Rxd7 29. Bxd7 Qxd7 30. Rae1 Rd6 31. Bxf6 Rxf6 32. Qb8 Rf5 33. Rh8† Kg6 34. Rd8 Qb5 35. Rd6† Kh7 36. Rd8 Qc5 37. Re3 Bd5 38. Rh8† Kg6 39. Qd8 Bf3 40. Rxf3 Rxf3 41. gxf3, 1-0.

More often, the threat to promote must be combined with other attacks because skillful defense cannot be overrun directly. In *Euwe—Smyslov* from the same tournament, the passed pawn acts as a strategic pivot. The tactical complexity typifies

this positional motif.



15. d6 Bd3 16. Bxb7 (Bronstein, in his superb tournament book, gives as a better try 16. a5 Bxf1 17. Kxf1 Nd7 18. Bxb7 Rb8 19. a6.) **Rb8 17. Bg2 Bxf1 18. Kxf1 Nd7 19. Nc4 Ne5.**

Black plans to return another pawn in order to develop his pieces and seize the initiative. Smyslov wants to attack the passer, not merely blockade it. To be effective, the blockade must occur in conjunction with threats to the pawn; otherwise, considering his spatial deficit, the defender smothers.

20. Nxe5 Bxe5 21. Bxc5 Qa5 (Preventing 22. Nb5 and bringing the f-Rook into play, Black is now better.)
22. Be3 Rfd8 23. Ne4 Bxd6 24. Nf6† Kh8? 25. Bd4 Be5 26. Nd7

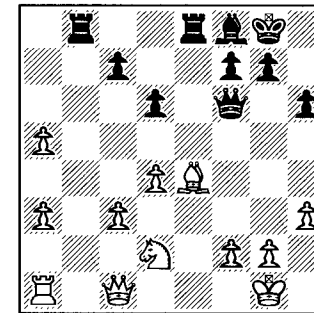
Now Bronstein gives:

I. 26... Rxd7 27. Bxe5† Qxe5 28. Qxd7 Qxb2 29. Re1;
 II. 26... Bxd4 27. Qxd4† Kg8 28. Nf6† Kh8 29. Nd5† Kg8 30. Ne7† Kf8 31. Qh8† Kxe7 32. Re1† (although 32... Kd7 holds—MB). Observe the astuteness of 24... Kg7.)

26... f6 27. Bxe5 fxe5 28. Qd2 (Better, says Bronstein, is 28. Qd6 Qa6† 29. Qxa6 Nxa6 30. Nxb8 Rxb8 31. Re1, when Black is in trouble.) **Rbc8 29. Kg1 Qc5 30. Bh3 Qe7 31. Qe2 Rxd7**, and 0-1 in 58.

In our previous examples, we've seen the adversaries struggle over the passed pawn. The possessor seeks to drive back the defender's pieces and destroy their effectiveness. Then the pawn may promote, or an attack can be launched using the pawn as cover. Naturally, the opponent tries to halt the pawn and render it weak. He wants to take over the initiative and eventually win the pawn. So the battle rages.

Less thematic, but nonetheless instructive, is this position from Suetin—Spassky, *Soviet Zonal 1964*. White has two a-pawns for the Exchange. To find out whether the pawns are strong or weak, we use the threat hierarchy and begin the search for mate and material wins.



Both Kings are safe, and nothing looms for the moment. It's Black's move, so he looks for a threat from White. Black wants to see if compensation for the Exchange exists beyond those jewels on the a-file. Following our method precisely, he figures rightly that it's best to disallow any surprises. If no dangers show up, Black will proceed with his own ideas.

White's compensation in material rests on a5. Let's see what happens if White (remember, we're giving him a free move for analytic purposes) plays 25. a6, intending to stroll to a8. The threat 26. a7 apparently forces 25... d5. Then if 26. Bxd5 Qxa6, Spassky turns his attention to a3. If 26. a7, ...Ra8 27. Bxd5 Rxa7 is similar: White must fall back.

The sharp-eyed analyst will notice that the trouble stems from the time lost with 25. a6; the real threat is 25. Bc6. This raifty move gains time to push the a-pawn: 25. Bc6 Re2 26. Ne4 Qf5 27. a6 Rxe4 (27... Qa5 28. Bb7) 28. a7. Black would

have to return the exchange, remaining a pawn down. So the game is not dull after all.

Luckily for Black, this is all hypothetical. He can plan 24. d5 25. Bxd5 Rb5 26. Bf3 Rxa5, liquidating the gangster on a5. If White varies with 26. c4 Rxa5 27. a4, then 27... Qa6, the key move, begins the attack. In this line, 27. Nb3 fails against ...Rxa3.

The game continued 24... d5 25. Bxd5 Rb5 26. Bf3 Rxa5 27. a4 Qa6 28. Qc2 c5 29. dxc5 (29. d5 Ra8) Bxc5 30. Qb3. From now on White has a wearisome defense, though he is not without a few chances. Nearly 60 moves later, he secured a draw. For the instructive final , see Andrew Karklins' excellent work *Modern Grandmaster Chess*, a deeply annotated account of the 1964 USSR Zonal Tournament.

It is worth noting that Karklins' method of appreciably improving his own play. He analyzed complex grandmaster games until he had answered all his questions. A simple idea, really. Just look at the game until it is clear, until you know what happened. Such work is demanding, yet gives great creative satisfaction. Try it.

Now a few words in summary: pawn structure is a crucial strategic element of any position, generally second only to King safety as a planning concern. Holes in the pawn structure can be occupied directly, but normally draw enough defenders. Your main study should center on indirect exploitation of holes, simply because opportunities for this are so common (see Lasker—Steinitz given earlier, in which d6 fell much later than the auxiliary weaknesses on the b-file).

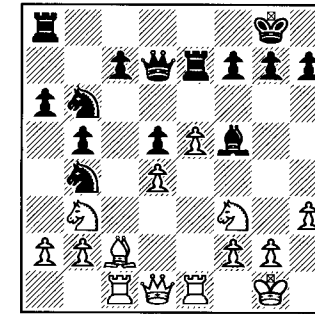
Pawn breaks form the basis of many plans. The open lines which result should be assessed, along with subsequent attacks. In essence you are unmasking enemy targets, so consider the pawn break as a transition rather than an autonomous strategy. Always calculate the follow-up.

Passed pawns are prized for their great potential, each one a possible Queen. Whether for attack or counterplay, these pawns weigh heavy on the table of chess elements. The central problem is in deciding whether the advance of the pawn will strengthen or weaken it. The initiative is everything here.

SUPPLEMENTAL GAMES, EXERCISES, ANSWERS

1) Fischer—Reshevsky, Santa Monica 1966

1. e4 e5 2. Nf3 Nc6 3. Bb5 a6 4. Ba4 Nf6 5. 0-0 Be7 6. Re1 b5 7. Bb3 0-0 8. c3 d6 9. h3 Nd7 10. d4 Nb6 11. Nbd2 exd4 12. cxd4 d5 13. Bc2 Be6 14. e5 Qd7 15. Nb3 Bf5 16. Bg5 Re8 17. Bxe7 Rxe7 18. Rc1 Nb4.



QUESTION: Analyze 19. Nc5 and 19. Bxf5.

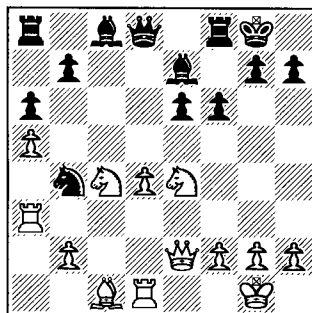
Which is better, and why?

ANSWER: 19. Nc5, as Fischer played, is sharper and trickier: Black's Queen must retreat, and he has chances to err. But 19. Bxf5 Qxf5 20. a3 Nd3 21. Qc2 Qg6 22. Nh4 Qh5 23. Qxd3 Qxh4 also is +—.

19. Nc5 Bxc2 20. Qd2 Qe8 (20... Qf5 21. Qxb4 and 22. Nxa6) **21. Qxb4 a5 22. Qc3 Bg6 23. Nh4 Na4 24. Qb3 Nxc5 25. Rxc5 c6 26. Rec1 Re6 27. f4 f5** (27... Be4 28. f5 Rh6 29. Qg3 Kh8 30. f6 gxf6 31. Rxc6 or 31. Qf4 — Reshevsky) **28. a4 bxa4 29. Qxa4 Rb8 30. Qa3 Qd8 31. Nxc6 hxc6 32. Rxc6 Rxc6 33. Rxc6 Qh4 34. Rxc6 Kh7 35. Rg5 Rb4 36. Qf3 Kh6 37. g3 Qxh3 38. Qxd5, 1-0.**

2) Geller—Korchnoi, USSR Zonal 1964

1. d4 d5 2. c4 dxc4 3. Nf3 Nf6 4. e3 e6 5. Bxc4 c5 6. 0-0 Nc6 7. Qe2 a6 8. a4 cxd4 9. Rd1 Be7 10. exd4 Nd5 (Better than 10... 0-0 11. Nc3 Nd5 12. Bd3 or 10... Nb4 11. Bg5 0-0 12. Nc3.) **11. Nc3 Ncb4 12. Ne5 0-0 13. Ne4 Nb6** (13... b6 14. Ra3) **14. Ra3 f6 15. a5 Nxc4 16. Nxc4.**



QUESTION : Can Black play 16... Nc6 17. Rh3 Nxa5?

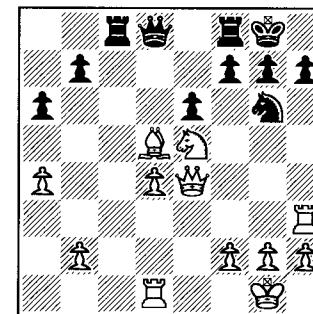
ANSWER: Doubtful. 18. Qh5 Nxc4 19. Qxh7† Kf7 20. Rg3 Rg8 (on 20... Ke8, 21. Rxg7 with threats of d5 and Qg6+—) 21. Qg6† Kf8 22. Bh6 wins, according to Karklins.

16... Nd5 17. Rb3 (17. Nc5; 17. Rh3) **Qc7 18. Nc3 Bd7 19. Nxd5 exd5 20. Nb6 Rae8 21. Nxd5 Bd6 22. Qf3?** (22. Qxe8 Qc2 23. Ne3 Qxd1† 24. Nxd1 Rxe8 25. Ne3†=) **Qxa5 23. Ne3 Ba4 24. Bd2** (24. Rxb7) **Bxh2† 25. Kh1 Qd8 26. Nf5 Bc7 27. Bh6 Rf7 28. Rc1 Bxb3 29. Qxb3 g6 30. Ne3 f5 31. Kg1 Qd7 32. Nd5 Qe6 33. g3 f4 34. Qxb7 fxg3 35. fxg3 Bf4, 0-1.**

3) Botvinnik—Petrosian, Game 2, World Ch. 1963

1. d4 d5 2. c4 dxc4 3. Nf3 Nf6 4. e3 c5 5. Bxc4 e6 6. 0-0 a6 7. a4 Nc6 8. Qe2 cxd4 9. Rd1 Be7 10. exd4 0-0 11. Bg5 Nd5 12. Bxe7 Ncxe7 13. Ne5 Bd7 14. Nd2 Bc6 15. Ne4 Nf4 16. Qf3 Bxe4

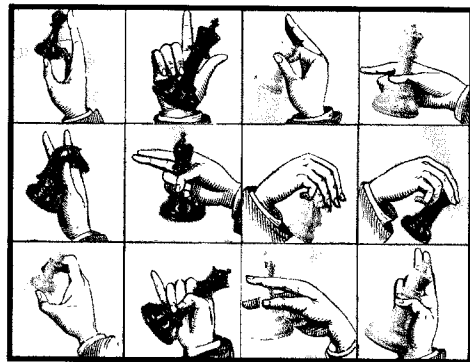
17. Qxe4 (17. Qxf4 Bd5 18. Bd3 Ng6) **Nfd5 18. Ra3 Rc8 19. Rh3 Ng6 20. Bxd5.**



QUESTION : How should Black recapture on d5?

ANSWER: After 20... Qxd5, 21. Qxd5 exd5 22. Rb3 Rc7 23. Nd3+— with the threat of Nc5.

20... exd5 21. Qf5 Qd6 22. Rb3 Rc7 23. g3 b6 (23... Nxe5) **24. Re1 Ne7** (24... Nxe5 25. Qxe5) **25. Qf4 Rc2** (The threat was 26. Ng6.) **26. Nd3 Qd8 27. Qg5 Nc8! 28. Qxd8 Rxd8 29. a5** (29. Nb4 Rc4 30. Nxd5 Rxa4=) **bxa5 30. Rb8 Rf8 31. Ra1 Ne7 32. Rxf8† Kxf8 33. Rxa5 Rd2 34. Rxa6 Rxd3 35. Ra8† Nc8, 1/2-1/2.**



5: The Elements of Planning

Placement of the Pieces

Besides the structural features of a position, the placement of individual pieces figures in your planning. Pieces vital for attack or defense, as well as misplaced and unprotected pieces, all suggest ideas. Who does not think of striking f7, for instance, when his Bishop stands on c4? Who passes up the chance for a Knight-versus-bad-Bishop ending when facing the French or Dutch defenses? Any unusual piece position must be scoured for a tactical or strategic motif.

The Misplaced Piece

A favorite motif is the misplaced piece — a Knight on the edge, an exposed Queen are examples commonly seen. To take advantage of your opponent's largesse (or perhaps your own brilliant play?) in creating a wayward piece, look for a direct attack. Because the victim's mobility is suspect, flight can often be prevented. And, of course, a prime rule of attack is to fix a target before striking — the sort of ruthlessness Machiavelli would applaud. The crippled piece saves you the effort normally exerted to force a weakness.

The misplaced piece may also be ignored while an attack commences on the opposite wing. The defender will then be caught short, his static piece unable to cross the board in time. You achieve a local material superiority on one side. The following battle features both strategies to exploit the then World Champion's errant Knight (*Portisch—Petrosian, Santa Monica 1966*):

1. c4 g6 2. d4 Bg7 3. Nf3 d6 4. Nc3 Nf6 5. g3 0-0 6. Bg2 Nc6 7. 0-0 a6 8. d5 Na5.

In this well-known line, Black hopes to profit from White's fianchetto by attacking c4. But this requires placing the Knight at a distant outpost.

9. Nd2 c5 10. Qc2 Rb8 11. b3 b5 12. Bb2 bxc4 (12... e6 or 12... e5) 13. bxc4 Bh6?! 14. f4 e5.

An alternative, from *Korchnoi—Bilek, Stockholm 1962*, 14... Ng4 15. Nd1 Rxb2 16. Qxb2 Bg7 17. Qc1 Bxa1 18. Qxa1, led to White's advantage.

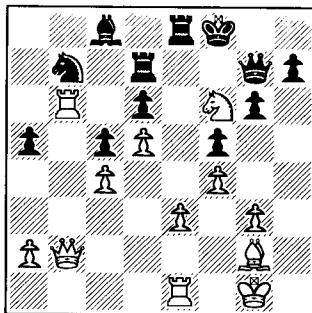
15. Rae1 exf4 16. gxf4 Nh5.

Botvinnik—Donner, Wageningen 1958, continued 16... Re8, but the finish was similar. We note only that Portisch considers himself a student of Botvinnik.

17. e3 Re8 18. Nce4.

White now begins to punish Petrosian's mistakes. The Bishop is brought to c3 and the Queen to a4, forcing the Knight into dismal retreat. The pawns on e3 and f4 block any counterattack and will later advance, completing the pincer.

18... Bf5 19. Bc3 Nb7 20. Qa4 a5 21. Rb1 (inviting 21... Bxe4 22. Nxe4 f5 23. Rxb7) **Qe7 22. Rfe1 Bd7 23. Qc2 Bf5 24. Qa4 Kf8** (24... Bd7 25. Qa3) **25. Rb6 Rbd8 26. Qb3 Bc8 27. Nf1 Rd7** (Better, if insufficient, was 27... f5 28. Nf2 with 29. Ng3 and e3-e4.) **28. Nfg3 Nxxg3 29. hxxg3** (29. Bf6 Nxe4) **Bg7 30. Qb2 f5 31. Bxxg7† Qxxg7 32. Nf6, 1-0.**



The position of White's Queen at the finalé illustrates the motifs in microcosm: the Knight is exploited directly (b7) and obliquely (f6). Portisch displayed systematic play and crisp tactics, a good definition of technique.

Usually a misplaced piece can be moved to safety, so the liability is temporary. The momentarily displaced piece must be punished by sharper methods than the siege of the permanent cripple.

In contrast to Petrosian's Knight, which could hardly be brought into active play, Black's King in the following game needed a mere tempo to skirt the danger. Unfortunately, the opponent was not known to be forgiving of error. Alekhine's combinative gifts expose the flimsiness of an apparently normal and placid defensive position (*Alekhine—Junge, Prague 1942*):

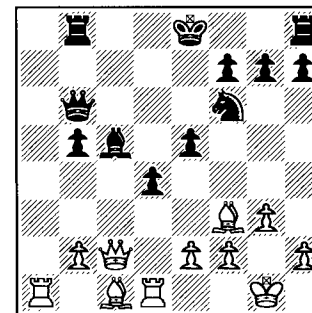
1. d4 d5 2. c4 e6 3. Nf3 Nf6 4. g3 dxc4 5. Qa4† Nbd7 6. Bg2 a6 7. Qxc4 b5 8. Qc6 Rb8 9. 0-0 Bb7 10. Qc2 c5 11. a4.

A sacrifice that is best declined by 11... b4. Black's backward development cannot bear handing over open lines to Alekhine.

11... Bxf3 12. Bxf3 cxd4 13. axb5 axb5 14. Rd1 Qb6.

Alexander mentions 14... Bc5 15. Bf4 Rc8 (15... e5 16. Bxe5) 16. Bb7 d3 17. Qxd3 Bxf2† 18. Kf1 as good for White.

15. Nd2 e5 16. Nb3 Nc5 (16... Be7) 17. Nxc5 Bxc5.



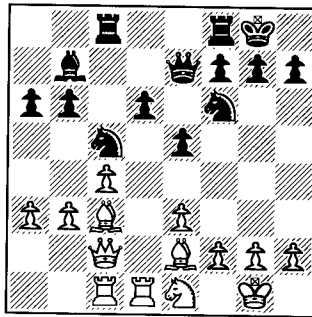
18. Ra6 Qxa6 19. Qxc5 Qe6 (19... Nd7 20. Bc6 f6 21. Qd6) 20. Bc6† Nd7 (20... Kd8 21. Bd2 b4 22. Qa5†) 21. Bxd7† Kxd7 22. Qa7† Kc6.

Fine now gives as best 22... Kd6 23. f4 f6 24. fxe5† fxe5 25. Bf4 exf4 26. Qxd4† Ke7 (...Kc6 27. Rc1† Kb7 28. Qxg7† Ka6 29. Ra1† Kb6 30. Qd4†) 27. Qxg7† Qf7 28. Rd7† Kxd7 29. Qxf7† Kc6 30. Qf6†. And on 22... Kc8, 23. Bd2 and 24. Rc1 wins. But Black's fatal error comes later.

23. Bd2 Rhc8 24. e4 Qb3? (24... dxe3 [Black seems to defend after 24... b4, 25. Ra1 Kb5! 26. Qa4† Kc5 27. Rc1† Kd6 28. Bxb4† Rxb4 29. Qxb4† Kd7.—MB] 25. Bxe3 threatens 26. Qc5† Kb7 27. Rd7†) **25. Ra1 b4 26. Ra6† Kb5 27. Ra5† Kc6 28. Qc5† Kd7 29. Ra7†, 1-0.** This imaginative attack will repay study.

Sometimes a piece is misplaced even though it stands in the center. Generally, such problem pieces duplicate the function of another piece and merely congest the game. With instructive carelessness, Black neglects the light squares by two innocent Knight moves (*Karpov—Parma, Caracas 1970*):

1. c4 Nf6 2. Nc3 e6 3. d4 Bb4 4. Qc2 0-0 5. Nf3 c5 6. dxc5 Na6 7. Bd2 Nxc5 8. e3 b6 9. Be2 Bb7 10. 0-0 d6 11. Rfd1 a6 12. b3 e5 13. a3 Bxc3 14. Bxc3 Qe7 15. Ne1 Rac8 16. Rac1.



According to Karpov, Black should dissolve the backward pawn and ensure light-square control with 16... d5 17. Qb2 dxc4 18. Bxc4 Rfe8. Instead of equalizing, Parma played **16... Nfe4**, perhaps striving too hard for a draw.

17. b4 Nxc3 18. Qxc3 Ne6.

"I think that it was because of this mistake that Black lost. On e6 the Knight has nothing to do." (Karpov.) Notice this piece guards squares that are inaccessible to White anyway. The minor pieces should *complement* the pawns and cover the light squares. Clearly, after the b7-Bishop is exchanged d5 will be weak and d6 a fixed target.

Earlier Parma had played e6-e5, rightly conceding a small weakening (d5, f5) to gain spatial equality. In response, Karpov withdrew the f3-Knight. So Black ought to be satisfied with that and attend to rectifying his previous concession (12... e5). Considering all this, 18... Ne4 makes sense. Even were White to follow the same plan as in the game, Black would save several moves.

19. Qd3 Rfd8 20. Bf3 Bxf3 21. Nxf3 g6 22. Nd2 Nc7 23. Ne4 Ne8 24. Qd5 Kg7 25. h3 Nf6 26. Nxf6 Kxf6 27. Qe4 Kg7 28. Rd5 Qc7.

Significantly, Karpov notes that the "stereotyped" plan Qd3, e4, etc., is hardly decisive. In this position, he must force another weakness or gain another weapon before a siege wins; otherwise, deadlock results because Black can defend a single weakness.

29. f4 Re8 30. fxe5 dxe5 31. c5.

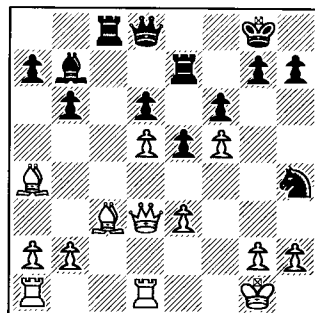
The passed pawn constricts the black Rooks. Pressure on e5 soon obliged Parma to play f7-f6, producing more problems. After lengthy maneuvers, White won in 66 moves. For an instructive ending of this type, look at *Alekhine—Eliskases, Buenos Aires 1939*, (see end of chapter).

Observe that the misplacing of Parma's Knight led more or less directly to the inferior and eventually lost heavy-piece endgame. The time lost with the trek ...Ne6-c7-e8-f6 did not help matters; characteristically, the bad piece must be re-assigned while other tasks are left unfinished. See, for instance, *Ivkov—Spassky, Santa Monica 1966*, for the tale of White's poor Knight, (see also end of chapter).

In the earlier analyzed Smyslov—Denker game (page 34), Black was additionally handicapped with a bad Bishop that resulted in the loss of a pawn. Here the Knights were exchanged, and Karpov turned to his c-pawn for the decision: an example of the revered "exchange of advantages."

Be Careful of the Overloaded Piece

Pieces that perform multiple functions can be valuable. But too many functions can lead to overload. The opponent forces the piece to execute one of its duties, leaving something else unprotected.



In *Tolush—Keres, Leningrad Moscow 1939*, Black has a problem with his offside Knight. 23. Qe4 is imminent, and no obvious counter is discernible. For instance, 22... e4 23. Qf1 Rc5 24. Qf4 fails to alter the balance. The trick is to see that the white Queen can be overloaded by forcing it to defend the B/a4.

Keres gives 22... b5 23. Bxb5 e4 24. Qf1 Rc5, threatening 25... Nxf5. White can then try 25. Bb4 Rc2 or 25. Bc4 Qc8 26. g4 Nf3†, neither of which is appealing. Also playable for Black is 22... b5 23. Bxb5 Qb6 24. Rf1 Rc5 25. Bc4 e4 26. Qe2 Bxd5.

Tolush answered **22... b5** with **23. Bb3**. Black then had gained control of d7, partly solving his Knight's predicament: **23... e4 24. Qf1 Qd7 25. Qf4 Nxf5 26. Rf1**. Again White hits the Knight, hoping to refute 26... g6 or 26... Nh6 with 27. Bxf6. Keres simply removed the troublemaker: **26... Rxc3 27. bxc3**. The sacrifice secures e5 and produces a weakness at c3. According to Keres, the game is approximately equal — Tolush believed that White held the advantage.

27... Re5 28. a4 (Better is 28. c4 b4 29. a3 bxa3 30. Rxa3 Qc7.) **Qc7 29. axb5 Qxc3 30. Rxa7 Nxe3 31. Rxb7 Nxf1 32. Qxf1** (Now 32. Qg4 or 32. Rb8† would draw.) **Qxb3 33. Qc1 h5 34. h4 e3 35. Kh2 e2 36. Qc7 Qg3† 37. Kxg3 e1=Q†, 0-1**.

The tactical operation beginning 22... b5 required 26... Rxc3

to finally break **White's** grip. And to play the Exchange sacrifice, Keres had to see at least another five moves. Thus the combination encompassed more than ten moves — and what moves! Try to follow the combination in your mind's eye from the diagram.

Returning to our theme, piece placement, this game's strategic clash becomes clearer: White hounded the Knight while Black activated his forces, maintaining dynamic equality. In such positions, the enforcer of principle (White here) must be careful not to underestimate the resources of the apparent violator of principle, whose planning relies on the unique tactical features of the game.

It is disconcerting to be playing strategically when the opponent springs a nasty surprise. As always, strategy and tactics must be mutually supportive; analysis links the general and the specific. Of course, Tolush realized all this after the game.

Exchanging

One technique that is sometimes helpful in planning is the hypothetical exchange. Simply stated, you imagine an instant trade of a pair of pieces, remove them from the board, and then reevaluate the game. The exchange may be immediately playable or a distant hope; it makes no difference, because you are searching for *ideas* first. Only when the swap is near to hand do concrete variations arise.

Let's say an unclear position occurs in your game, a Rook and two minor pieces per side. No plan springs to mind, but you want to find some positional basis for a plan before resorting to a coin flip or ouija board.

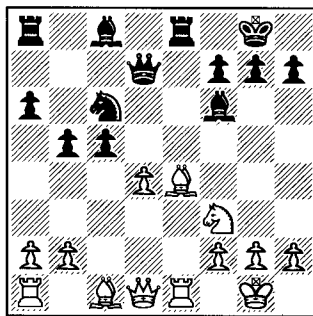
At this point you could remove two Knights from the board (preferably one from each side). Then you judge the game: is your situation in general better or worse than prior to the trade? If the balance has shifted, you know that one of those Knights bears watching. Maybe the piece covers an important square you'd not properly valued. Perhaps it is blocking a cru-

cial file. In any case, you look for a “hook” on which to base a plan. A favorable hypothetical swap is the first step toward engineering an actual exchange on the board.

If no change in the balance of power is obvious, search for other possible trades until an idea turns up. Quite often, for example, holding the initiative depends on the specific effect of a single piece. The swapping method can help discover that piece in time to alert you to opportunity or danger.

By trying various combinations of pieces to exchange, you get a better picture of the terrain, even if the desired trade cannot be achieved. Once the favorable swap is found, you have begun to shape the game, to impose your will on the situation.

Lest you think that searching for chances to cut wood is merely spineless, consider the next example. Beneath the combinative overlay that is characteristic of Alekhine, the strategic motif is a simple exchange (*Alekhine—Eliskases, Podebrad 1936*):



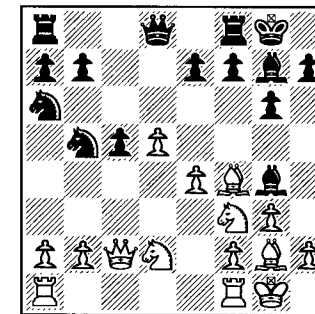
Evaluate the following exchanges first by mentally removing the desired pieces, second by studying the lines that feature the exchange. First, look at the obvious trade 19. Bxc6 Rxe1† 20. Qxe1 Qxc6 21. d5 Qd7. Black stands well. Now try pairing the Knights: 19. Ne5 (intending Nxc6) Bxe5 20. dxe5 Qxd1 21. Rxd1 Bb7 22. Rd7 Rad8. Nothing there.

Mentally removing the Queens is good, but there is no evident line: 19. dxc5 clearly fails. So try trading dark-square Bishops. White would clear his back rank, allowing dxc5. But most

interesting is the denuding of Black’s kingside. This is a definite possibility, **19. Bg5**.

Alekhine gives 19. Bg5 Bxd4 20. Bf5 (offering to graciously “remove the guard”) Rxe1† 21. Qxe1 Qd6 22. Qe8† Qf8 23. Bxh7† winning. And 19... Bxg5 20. Nxb5 g6 (or 20... h6 21. Qh5) 21. dxc5. Hence Eliskases tried **19... Rxe4 20. Rxe4 Bxd4 21. Nxd4 Nxd4**. As Alekhine notes, White must act quickly, else there is a long road to victory. **22. Qh5** (intending 22... Bb7 23. Rh4 h6 24. Bxh6 Nf5 25. Bxg7) **Bb7 23. Rh4 Qf5 24. Be3** (hoping for 24... Qxh5 25. Rxh5 Nc2 26. Rd1 Nxe3 27. fxe3 c4 28. Rc5 and 29. Rd7 — Alekhine) **Rd8 25. Rxd4, 1-0**.

Many examples of such clear strategy backed by crisp tactics can be found in the games of leading grandmasters. A more positional treatment is offered by the future World Champion Karpov versus Korchnoi (White) in their game from the Moscow 1971 tournament.



White’s Knights are well placed, but his Bishops, on close examination, are not so active. Black sets out to exchange the Knights, thereby gaining the initiative. Crucial to the plan is the altered pawn position (13... cxd4) which grants Karpov a queenside spatial edge and vitiates the response Nd2-c4.

12... Nd4 13. Nxd4 cxd4 14. Nf3 (aiming for d3, dampening Black’s B/g7) **Qb6 15. Ne5** (sunder

is Qd2 first) **Bxe5 16. Bxe5 f6 17. Bf4 Rac8 18. Qa4.**

18. Qd2 g5 19. Bxg5 fxg5 20. Qxg6† Qg6 — a hard-to-foresee aura, Qb6-g6, that Karpov must have had in mind before his 12th; otherwise, 18. Qd2 would give White good prospects. Black's pieces now show great activity.

18... g5 19. Bc1 Be2 20. Re1 d3 21. Bf1.

Offering this sacrifice: 21... Qb4 22. Qxb4 Nxb4 23. Bxe2 Nc2 24. Bxd3.

21... Bxf1 22. Rxf1 Rc2 23. Be3 Nc5 24. Qd4 e5 25. dxe6 Qxe6 26. Rac1 (26. b4) **Rc8 27. b4 Nxe4 28. Rxc2** (28. Qxd3 Nxf2) **dxc2 29. Rc1 b6 30. f3 Nd6 31. Qd3 Rc6 32. a4 Qc4 33. Qd2 Nf7 34. f4 g4 35. b5 Rc8 36. Qd7 h5 37. Kf2 Qc3 38. Qf5** (38. Qd4—Ed.) **Re8, 0-1.**

When the pawn structure is rigid, the strategic plans for both sides tend to be better defined as well. Certain squares are inaccessible, while others dominate the play. The battle centers on the effort to arrange the pieces to complement the static pawns. This point is illustrated in our next example. Black's doubled c-pawns are the static element. White seeks to exploit their weakness, Black to benefit from their central control (*Portisch—Fischer, Sousse 1967*):

1. Nf3 Nf6 2. g3 g6 3. c4 Bg7 4. d4 0-0 5. Bg2 d6 6. Nc3 Nbd7 7. 0-0 e5 8. e4 c6 9. h3 Qb6 10. Re1 Re8 11. d5 Nc5 12. Rb1 a5 13. Be3 Qc7 14. Bxc5 dxc5 15. dxc6 bxc6.

Portisch executed his threat, doubling the pawns. White can conceivably follow up with an attack on c5, using his Queen and Knights. If Fischer were forced to defend passively, he might place his Queen on a7, Bishop on f8, and Knight on d7.

Portisch could then play his Bishop to h3 and swap the vital d7-Knight.

Fischer refuses to agree to this. d4 beckons his Knight:

Nf6-h5-g7-e6, incidentally guarding c5. Once on d4, the Knight dominates the game because an exchange creates a passed pawn. It remains to look at lines that pit these plans against one another. On 16. Na4 Bf8 17. Qb3 Nh5 18. Qe3 Qa7 19. Nd2 Ng7 20. Nb3 Ne6, Black's scheme triumphs. Portisch's idea is a bit too slow to achieve a direct plus.

Alternate plans for White are difficult to find: the black pawns (c6, c5, e5) restrict White's cavalry, and invasion on the d-file is impractical while entry squares are easily covered. Pawn breaks such as f2-f4 and h3-h4-h5 seem unlikely to damage Black.

Portisch decides to attack c5, occupying the defenders, then exchange his passive Bishop. Next, he opens a kingside file (h3-h4-h5) which frees his Rooks for duty (eventually) against Fischer's King. Observe that exchange of major pieces favors White. In the endgame 2Ns versus B+N, Portisch has the advantage over Black's bad Bishop and isolated pawns.

In spite of all this potential for White, the simple idea of ...Nd4 gives Fischer some initiative. His plan is more rapid and more threatening, the stack of c-pawns notwithstanding.

16. Na4 Bf8 17. Qb3 Nh5 18. Qe3 Qa7 19. h4 Ng7 20. Kh2 f6 21. Bh3 Bxh3 22. Kxh3 Ne6 23. h5 gxh5.

This capture fights White's kingside expansion. Unopposed, Portisch would play his Rook to the h-file and encourage at least a favorable trade. Although the open d-file looks inviting, both sides have shunned it: Portisch has no entry point, and Fischer wants to avoid a Rook swap. By playing 23... gxh5, Fischer diverts one white Rook, enabling him to control the d-file.

24. Rh1 Rad8 25. Kg2 Qg7 26. Kf1 Qg4 27. Rh4 Qg6 28. Qe2 Bh6 29. b3 Rd7.

Larsen gives 29... Bg5 30. Nxg5 fxe5 31. Rxh5 Rd2 with Black as better. Note the difference in the game continuation.

30. Rd1 Rxd1† 31. Qxd1 Rd8 32. Qe2 Bg5 33. Nxe5 fxe5 34. Rxh5 Rd2 35. Qg4 h6 36. Rh2 Kg7.

White's Knight now begins a trek to f5. If Fischer tried 36... Rxa2, then 37. Nc3 helps the steed on its way. Black does succeed in stopping the Knight (after 36... Kg7), but Portisch responds with a drawing combination.

37. Nc3 Rd3 38. Nd1 Qf7 39. Kg2 Qd7 40. Qf5 (40. Ne3?) Rxd1 41. Qxe5† Kg8 42. Rxh6 Ng7 43. Rg6 g4 44. Rxg7† Qxg7 45. Qe8† Kh7 46. Qh5† Kg8, 1/2-1/2.

This game shows the importance of intentions. Fischer's Knight never reached d4, yet the battle centered on that possibility. Had White remained passive, he clearly would have encountered serious trouble. As Tartakower wrote: There is an art in obtaining a draw from a critical position. Psychologically, it is a question not only of nerve, but also of recognizing in good time that the situation is serious before it is definitely beyond repair.

Portisch knew he was in trouble.

A good study exercise consists of searching for the point at which the decisive combination must have been foreseen. (In this respect, the quiet Move 36 deserves some attention.) Not only do you acquire a sharper idea of a game's tactical depth, but the plan in question receives a thorough analysis — finally, you know where plans begin.

In general, tactical calculation ends with a relatively quiet position. Assessment of indeterminate positions is difficult. *To ensure sound analysis, check at least one move beyond the end of a combination — to avoid any stinger.*

Sometimes, as in the Tolush—Keres game, a player sees a

forced line, estimates the following move or two, then calculates another forced line. Although the middle of the operation is not certain, this technique makes long calculations possible. In fact, this linking of small plans gives the impression of inevitability found in well-played games.

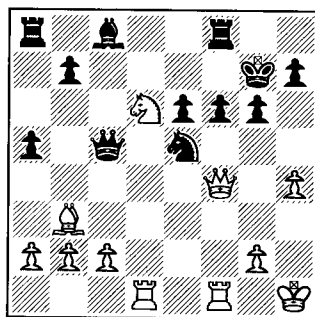
To summarize this section:

- Badly situated pieces may suffer exploitation, directly or indirectly.
- Even centralized pieces can prove misplaced.
- Be aware of each piece's function. Ask what your pieces can do for you.
- When you lack ideas, try mentally exchanging a pair of pieces. The resulting position may give you a clue.
- Finally, a fixed pawn structure often requires the pieces to conform; certain squares become permanent outposts which guide planning.

SUPPLEMENTAL GAMES AND EXERCISES

Tal—Bilek, Miskolcs 1963

1. e4 d6 2. d4 g6 3. Nc3 Bg7 4. Nf3 c6 5. Bc4 Nf6 6. e5?! dxe5 7. Nxe5 0-0 8. 0-0 Nbd7 9. f4 Qc7 10. Qf3 a6 (10... c5 11. Nb5 Qb8 12. Nxf7) 11. Re1 e6 12. Bb3 c5 13. Be3 cxd4 (13... b6!) 14. Bxd4 Nxe5 15. fxe5 Nd7 16. Ne4 Bxe5 17. Bxe5 Qxe5 18. Rad1 Kg7 19. Nd6 Qc5† 20. Kh1 Ne5 21. Qf4 f6 22. Rf1 a5 23. h4.



Question: Tal says that 24. Ne8† is threatened.

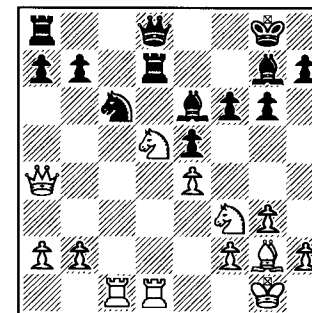
Is he bluffing?

ANSWER: Yes. He gives 24. Ne8† Rxe8 25. Qxf6† Kg8 26. Rd8 Rxd8 (26... Bd7? 27. Bxe6†) 27. Qxd8† Kg7 28. Qf6† Kg8 29. h5 gxh5? 30. Qg5† Kh8 31. Rf7 Nxf7 32. Qxc5. But 29... Bd7 forces White to give perpetual check: 30. Bxe6† Bxe6 31. Qxe6† Kg7 32. Qf6†.

23... Ra6 24. Ne4 Qe7 25. h5 h6 26. Qg3 a4 27. Rxf6 Rxf6 28. Qxe5 axb3 29. axb3 b6 (29... gxh5 30. Nxf6 Qxf6 31. Qc7† Kg6 32. Qxc8) 30. b4 (30... Kf7 31. Nxf6 Qxf6 32. Qc7†), 1-0.

Portisch—Schmidt, Bath 1973

1. d4 Nf6 2. c4 g6 3. Nf3 Bg7 4. g3 0-0 5. Bg2 d5 6. 0-0 Nc6 7. cxd5 Nxd5 8. Nc3 Nb6 9. e3 e5?! (...a5) 10. d5 Na5?! 11. e4 c6 12. Bg5 f6 13. Be3 cxd5 14. Bxb6 Qxb6 15. Nxd5 Qd8 16. Rc1 Nc6 17. Qb3 Rf7 18. Rfd1 Be6 19. Qa4 Rd7.



Question: White played 20. h4. What is the point?

ANSWER: By swapping Bishops with Bh3, the N/d5 is secured; also, the h-file can be opened for attack. See Portisch—Fischer, Sousse 1967, analyzed earlier.

20. h4 Bf8 (20... Ne7, given by Varnusz as adequate, is refuted by 21. Nc7) 21. Kh2 Kg7 22. Bh3 Bxh3 23. Kxh3 Qe8 24. Kg2 Rad8 25. h5 Qf7 (25... gxh5 26. Nh4) 26. hxg6 hxg6 27. Rh1 Kg8 28. Qc4 Bg7 (28... Kg7 29. Rh3) 29. b4 Ne7 30. Nxe7† Rxe7 31. Qe2 Red7 32. Rc2 a6 33. Nh4 Rd4 34. Qg4 f5 (34... g5 35. Nf5 Rd2 36. Rxd2 Rxd2 37. Nxc7 Kxc7 38. Qc8 — Varnusz) 35. Qxg6 Qxg6 36. Nxc6 fxe4 37. Ne7† Kf7 38. Nf5 R4d7 39. Re1 Kf6 40. Nxc7 Kxc7 41. Rxe4 Kf6 42. Rh4 Rd4 43. Rh6† Kf5 44. Rb6 Rd2 45. Rxd2 Rxd2 46. a4 Rd7 47. a5 e4 48. b5 (48... axb5 49. Rxb5† Kg4 50. Re5 Rd4 51. Rxe4†), 1-0.

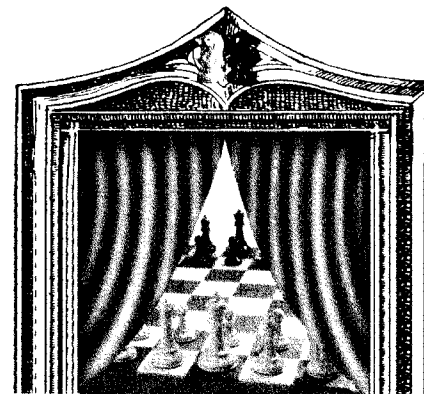
Alekhine—Eliskases, Buenos Aires 1939

1. e4 c6 2. d4 d5 3. exd5 cxd5 4. c4 Nf6 5. Nc3 e6 6. Nf3 Be7 7. cxd5 Nxd5 8. Bb5† Bd7 9. Bxd7† Nxd7 10. Nxd5 exd5 11. Qb3 Nb6 12. 0-0 0-0 13. Bf4 Bd6 14. Bxd6 Qxd6 15. Rfe1 Rac8 16. Rac1 h6 17. Ne5 Rc7 18. g3 Rfc8 19. Rxc7 Rxc7 20. Qb5 Nd7 21. Nxd7 Rxd7 22. Re8† Kh7 23. h4 a6 24. Qe2 Rd8 25. Re7 Rd7 26. Re5 g6 27. h5 Qf6 28. Qe3 Rd6 29. Qb3 Rb6 30. hxg6† Qxg6 31. Qxd5 Rxb2 32. Rf5 Rb5 33. Rxf7† Kg8 34. Rf6† Rxd5 35. Rxg6† Kh7 36. Rb6 Rxd4 37. Rxb7† Kg8 38. Rb6 Ra4 39. Rxh6 Rxa2 40. Kg2 a5 41. Ra6 a4 42. Ra7 a3 43. g4 Kf8 44. g5 Kg8 45. Kg3 Ra1 46. Kg4 Rg1† 47. Kf5 Rg2 48. f4 a2 49. Kf6, 1-0.

Ivkov—Spassky, Santa Monica 1966

1. d4 Nf6 2. c4 e6 3. Nf3 b6 4. g3 Bb7 5. Bg2 Be7 6. 0-0 0-0 7. Nc3 Ne4 8. Nxe4 Bxe4 9. Ne1 Bxg2 10. Nxb2 d6 11. e4 Nd7 12. Be3 Qc8 13. Nf4 c6 14. Rc1 Re8 15. Nd3 c5 16. f3 Qa6 17. a4 Bf6 18. Nf2 cxd4 19. Bxd4 Bxd4 20. Qxd4 Nc5 21. Qxd6 Qxa4 22. Qd1 Qb4 23. Qc2 Red8 24. Rfd1 h6 25. Rxd8† Rxd8 26. Rd1 Rxd1† 27. Nxd1 Qe1† 28. Kg2 a5 29. h4 Kf8 30. h5 Ke7 31. Nf2 Qe3 32. Qd1 f6 33. Kf1 Nb3 34. Kg2 Nd2 35. Nh3 Nxc4 36. Nf4 Qxf4, 0-1.

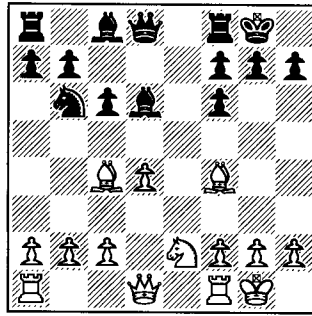
6: The Elements of Planning Open Lines



Analysis is closely linked with the proper use of open lines. Lines provide the terrain on which the chess battle is fought. You need lines to move your forces into hostile territory as well as within your own camp. And because these highways are so important, the struggle often flares over who will dominate them.

Recognizing open lines is fairly simple. It is often enough to see a clear file to find the move Re1. In general, however, you must consider a variety of open and potentially open lines — evaluation is needed. To value a line, we consider the tactical or strategic options with it, the specific plans that exploit the positional artery.

In the absence of tactical reasons, you should occupy lines that prevent enemy encroachment. If you are unable to undertake positive action, at least frustrate the opponent's scheme. One more point: open files, ranks, and diagonals are merely pathways, means to an end. By themselves they represent only potential value.



In the above position, from *Karpov—Korchnoi, 1978*, Black has just played ...Nb6. Karpov must decide which diagonal best suits his Bishop; the moves are Bd3 and Bb3. The first allows the queenside majority to march unhindered, but surrenders any real kingside pressure. The second Bishop move keeps d5 and f7 under surveillance, but retards any queenside push. Because the battle is not yet joined, specific variations give way to general considerations and logic.

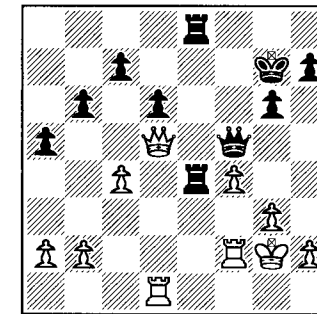
The question reduces to: which side of the board should White play on? The pawn structure favors queenside expansion, because Black's kingside battalions cannot forcibly create a passed pawn in the endgame — a situation analogous to the Ruy Lopez, Exchange variation. Korchnoi's kingside pawns also discourage White from playing for mate. The extra detachment on f6 looks solid. Opening other lines on that wing seems difficult in view of the many defenders.

White retains more chances with Bd3, as chosen by Karpov. He can slowly prepare the pawn advance without risk, although Black's game is defensible. Later in the game, an error by Korchnoi allowed the white Bishop to settle on f3, further supporting the queenside push. Karpov was soon winning, but achieved a draw after some spectacular play.

The power of a Rook on the seventh rank is familiar to everyone. The strength of that maneuver comes from the numerous targets available as the Rook moves laterally, feasting on pawns or chaining the victim to passive defense. Rubinstein convincingly demonstrates how to arrive at such a favorable position. By simply controlling the e-file, he builds pres-

sure that eventually threatens White's entire game (*Duras—Rubinstein, St. Petersburg 1909*):

1. e4 e5 2. Nf3 Nc6 3. Bb5 a6 4. Ba4 Nf6 5. d3 d6 6. c4 g6 7. d4 exd4 8. Nxd4 Bd7 9. Nxc6 Bxc6 10. 0-0 Bg7 11. Nc3 0-0 12. f3 Nd7 13. Be3 Ne5 14. Bb3 b6 15. f4 Nd7 16. Bd4 Nc5 17. Bxg7 Kxg7 18. Bc2 a5 19. Qg4 Nxe4 20. Nxe4 f5 21. Qf3 fxe4 22. Bxe4 Bxe4 23. Qxe4 Qf6 24. Rf2 Rae8 25. Qd5 Qf5 26. Rd1 Re4 27. g3 Rfe8 28. Kg2.



To begin analyzing, we rank the threats. Both Queens prevent the opponent from causing much trouble on the diagonals, so the Kings are fairly safe. No material dangers are evident; everything seems rather well protected. Next on our list: positional threats.

Black's Queenside majority is restrained by d-file pressure, forcing him to look toward the center and kingside. His task is to "materialize" the e-file control. Because playing a Rook into e1 or e2 would only lead to exchanges, Rubinstein decided to advance his h-pawn. A sequence h7-h5-h4xg3 promises to weaken g3 and open the h-file. But before clearing the h-file, Black brings his own King to relative safety.

Rubinstein's slow plan is feasible because of Duras' passivity. Yes, passivity. The best White can do is swap Queens. His Rooks appear free enough, yet actually do little, inasmuch as the only open file is off limits. The major problems are caused by White's f4-pawn; it would be much happier on f2.

28... h5 29. b3 Re3 30. Rd4 Kf6 31. h3.

Lasker mentions in the tournament book that this makes it easier for Black, but he adds that the game was already lost: 31. Rdd2 h4 32. Qxf5† gxf5 33. Rf3 hgx3 34. hgx3 Re2† 35. Rf2 Rxd2 36. Rxd2 Re3. In this new position, Black threatens ...a5-a4 — those Rook pawns! — and White must either move his b-pawn or face a4-a3 and eventually ...Rb2. You may find it of interest to work out the variations. White's passivity is striking.

31... h4 32. Qxf5† gxf5 33. gxh4 Rg8† 34. Kf1 Rxh3 35. Ke2 Re8† 36. Kd2 Rxh4 37. Rg2 Reh8 38. Kc3 Rh3† 39. Rd3 Rxd3† 40. Kxd3 Rh3† 41. Kd4 Rf3 42. Kd5 Rxf4 43. Kc6 Rg4 44. Rf2 Rg7 and Duras **resigned** on the **65th move**.

This instructive fight illustrates a valuable principle in play with the heavy pieces (Queens and Rooks): purely passive defense of weak pawns generally loses. A single weakness may be held by simple protective moves, but multiple trouble spots cannot. Unfortunately for Duras (and most of Rubinstein's opponents), the previous play resulted in the exchange of his active forces.

Passive Defense

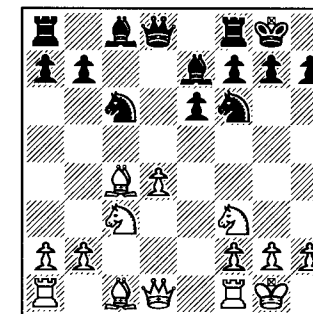
Let's look into the difficulties of passive defense. Commonly, the attacker focuses on a point, say, a weak pawn, which the defense clusters to protect. Given the mobility of major pieces, the aggressor can switch fronts quickly. (In the last game, Black successively attacked g3 and b3.) The defenders, often cramped behind or alongside the weakness, respond clumsily. The attacker's secondary targets usually prove to be fatal because the defense cannot match the first player's half-move advantage. Finally, considering the major pieces' firepower, the defender's best chance is frequently a sacrifice. In such positions, the loss of a pawn counts for less than fighting for the initiative. The *leitmotif* with the major pieces is active play.

The Isolated Queen Pawn

The Isolated Queen Pawn (IQP) is important in the study of open lines. A skilled player can handle both sides of this complex situation, taking the pawn and an active game or fighting against the "isolani." Two openings that often produce the isolated Queen pawn are the Queen's Gambit and the French Defense. For simplicity, we examine positions stemming from the Queen's Gambit with White having the pawn.

As we know, the IQP offers its owner two files (c and e) and two outposts (c5 and e5). Offhand you might think that the attacker should occupy the files straightaway, yet normally this does not happen. The problem with Rc1 is ...Rc8; exchanges tend to favor Black. Fewer pieces mean that White's dynamic plus is minimized while the d5 hole remains.

Therefore, *as long as the IQP is exposed, the c-file is usually neglected by White if he wants to attack kingside*. He husbands the Rooks, playing them to d1 and e1, or a3 and e1. Only when Black captures e6xd5, covering the IQP, do both files become operative. Then White may be able to transform his lead in development into a positional advantage. (See the supplemental game *Botvinnik—Alekhine, AVRO 1938*.)



In his famous work, *My System*, Nimzovich recommends a solid, centralized setup in the Queen's Gambit, aiming for d4-d5 and queenside play rather than mate. From the diagram, he would suggest 1. Be3 2. Qe2 3. Rfd1 4. Rac1. Against proper defense, however, this method gives few chances for the ini-

tiative. Black develops easily, and his King is in no particular danger.

An example of what can happen when White's dynamic edge is squandered appears in *Uhlmann—Karpov, Leningrad 1973*.

1. c4 c5 2. Nf3 Nf6 3. Nc3 d5 4. cxd5 Nxd5 5. e3 e6 6. d4 Nc6 7. Bd3 cxd4 8. exd4 Be7 9. 0-0 10. Re1 Nf6 11. a3 b6 12. Be3 Bb7 13. Rc1 Rc8 14. Bb1 Rc7 15. Qd3 Rd7 16. Qc2 (Hardly a sign of success.) **g6 17. Ba2 Ng4 18. Rcd1 Nxe3 19. fxe3 Bf6 20. Qf2 Bg7 21. Rd2 Ne7 22. e4 h6 23. Red1 Qb8 24. Qe3 Rfd8 25. h3 Kh7 26. Kh1 a6** (While White can do nothing, Black may tighten his grip by ...Ba8 and ...b5-b4, seizing the b-file) **27. Rf2 Ng8 28. Rdf1 b5 29. h4** (Better was 29. d5, but there are too many holes to defend. The game looks like a Grünfeld gone wrong for White.) **Nf6 30. Ne5** (30. Nh2) **Rxd4 31. Rxf6 Qxe5 32. Rxf7 R8d7 33. Rxd7 Rxd7 34. Qh3 Rd6 35. Bb1 Rd2 36. h5** (Hopeless, but it does hold e4 temporarily.) **gxh5 37. Nd1 Bc6 38. Qf3 Be8 39. b4 Bg6 40. Nf2 Qd4 41. Nh3 e5 42. Nf2 Rb2 43. Kh2 Qc4 44. Rd1 Rb3 45. Nd3 Qxe4, 0-1.**

Of course, Nimzovich's suggested development is not that bad. But it pays to play more aggressively. Uhlmann never had any threats; the outposts at c5 and e5 were neglected, and the e3-Bishop merely fodder for exchange. Furthermore, White's Rooks shuffled about, malcontent, whereas the Queen belonged on e2 in this system. Apparently, Uhlmann played natural moves hoping that solid nonaggression would secure a draw.

Contrast all this with Karpov's sharp-witted maneuver Rc8-c7-d7, which virtually neutralized White's queenside play. Black prepared his siege and opened the lines (by threatening b5-b4 and e6-e5) on his schedule. As usual, the player with the pawn breaks dictated the line openings — and this extra flexibility amounted to a lasting initiative.

Returning to the last diagram, a generally more active formation for White results from Qd3, Re1, Rd1, Bg5, Bb3 (or Bb1). The sharpness of this setup is clear. The B/g5 can assist in a mate on h7. In addition, the advance d4-d5 is hardly abandoned, and sacrificial possibilities force Black to defend with extreme care.

Possibilities became reality in the game *Browne—Zuckerman, Atlantic Open 1973*. Although White used a formation somewhat different from that sketched above, the open lines figure similarly.

1. d4 d5 2. c4 e6 3. Nc3 Be7 4. Nf3 Nf6 5. Bg5 0-0 6. e3 Nbd7 7. Bd3.

This move encourages a clearance in the center, White relinquishing a tempo to reach a position from the Queen's Gambit Accepted. This approach has also found favor with those chess fighters, Botvinnik and Korchnoi. The usual move is 7. Rc1.

7... dxc4 8. Bxc4 c5 9. 0-0 a6.

An attempt to play with pieces only (9... Nb6) proved weaker in *Botvinnik—Vidmar, Nottingham 1936*. White avoided creating a target with 10. a4 and pressed his kingside attack.

10. a4 cxd4 11. exd4 Nb6 12. Bb3 Bd7 13. Ne5.

Browne gives a good alternative, 13. a5 Nbd5 14. Nxd5 Nxd5 15. Bxd5 exd5 16. Bxe7, and says he aimed for more.

13... Bc6 14. Bc2 (14. Nxc6?) **Nbd5 15. Bb1 Nb4.**

This move constricts White's B/b1 but may allow Ra3-h3; the Rook can do serious damage from the third rank. See, for instance, the QGA games 2 (see page 80) and 8 (see page 113) from *Botvinnik—Petrosian 1963*.

16. Re1 g6 17. Bh6.

Note the Bishop's new mission: because the h7-mate threat is parried, White tries to weaken f7. Mate on g7 is still far off, so White prepares a new attack with the aid of his a1-Rook.

17... Re8 18. Ra3 Qd6.

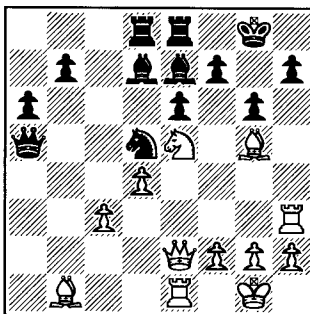
Disturbing Browne's buildup with 18... Nbd5 seems preferable: 19. Nxd5 Qxd5 20. Rg3 Rad8 or 19. Rb3 Nxc3 20. Rxc3 Rc8. Now the R/a3 enters the battle.

19. Ne2 Rad8 20. Rh3 Qd5 21. Nf3 Qa5 22. Nc3 Nbd5.

Rather nonchalant. Black intends to annex the a-pawn, assuming that the kingside needs no further protection. Perhaps more tenacious was the imbroglio 22... Ng4, trying to uproot the attackers: 23. Bf4 Nd5 24. Nxd5 Bxd5 25. Ne5 (25. Ng5 Nf6) Nxe5 26. Bxe5 f6 27. Rxh7 Qxe1† 28. Qxe1 Kxh7 seems at least tenable. Zuckerman's move obliges Browne to throw everything at the King.

23. Ne5 Nxc3 24. bxc3 Bxa4 25. Qe2.

Browne now suggests 25... Bb5 26. c4 Bd7, opening the e1-a5 diagonal to observe the e1-Rook.

25... Bd7 26. Bg5 Nd5 (26... Kg7 27. Qd2).

After 26... Nd5

**27. Nxf7 Bxg5 28. Rxh7 Nf6 29. Bxg6 Nxh7
30. Qh5 Qxc3 31. Qxh7† Kf8 32. Rf1 Qxd4
33. Ne5 Qf4 34. Nxd7† Rxd7 35. Qh8† Ke7
36. Qxe8† Kf6 37. Qxd7.**

As usual, GM Browne charges unbearable interest when collecting his material loans. The finish is routine.

**37... Kxg6 38. Qxe6† Bf6 39. Qe8† Kh6 40. g3
Qb4 41. Re1 a5 42. Re6 Qb2 43. Qf7 Kg5 44.
h4† Kg4 45. Qg6† Kh3 46. Qf5#.**

Let's recap the lines used by the various pieces. White's Queen stayed on the light squares (d1-h5), because, before the breakthrough, the dark squares were less accessible: e2 proved a safe, active post. The white Rooks contributed heavily; open files and the lift Ra3-h3 fed the necessary firepower into the attack.

This opening often turns on whether White's heavy pieces participate, for Black's defenses can usually repulse threats from the minor pieces alone. Browne got maximum benefit from his Rooks, while Black's went unnoticed. Recall that the attack crystallized after Ra1-a3.

Another crucial element in these IQP positions is control of d5 and the a2-g8 diagonal. Black concentrated on barring d4-d5 by keeping minor pieces trained on d5. Nevertheless, early in the game the b3-Bishop was available for a favorable simplification. Thus, although unused, the a2-g8 line remains a critical one for the light-square Bishop in assisting d4-d5 and threatening f7.

The dark-square Bishop for White had a limited yet vital mission. On g5 it generated threats to h7 and more or less forced g7-g6. After that, the move to h6 further annoyed Black, weakening f7 and hemming in the King. A point of interest: Black must be careful in countering Bh6 with a move like ...Bf8, because the exchange frees h6 for a later Queen invasion.

In the game, Zuckerman might have tried to contest the initiative on Moves 18 and 21. Instead, he chose to capture

material and rely on his castled position. This **strategy** often works — here, Black cut the margin of safety too thin.

One practical reason for the defender's trouble in the IQP game is that he must arrange his pieces to increase pressure on the pawn. Blockade and assault are two different strategies. For instance, withdrawing the f6-Knight to allow ...Bf6 exposes the kingside. Such redeployments risk great danger when the attacker is well placed but lacking a decisive blow. The very movement of a defensive piece can shatter the delicate balance.

How many times have we seen a defender patiently build up a solid fortress only to ruin everything with a premature punitive raid? It is more than a matter of timing; it involves recognizing the latent threats within an apparently stalemated attack. The tendency to relax after repelling the first wave often proves fatal to the defense, as perusal of the games of Alekhine or Tal will confirm.

To summarize this chapter: *pawn structure is largely responsible for your choice of open lines.*

- Although pawn breaks and sacrifices can open new files and diagonals, you have to plan on using existing lines.
- Long before a combination is visible, decisions must be made on where to place each piece. The watchword is cohesion: the pieces should complement one another. Setups based on a hoped-for surprise raid or trap ought to be avoided.

A characteristic trap is prepared with three dubious moves and parried by a simple reply. Another common trap consists of delaying a necessary move, waiting for a blunder, in hopes of scoring a quick win. The result is generally a free tempo presented to the opponent. If the other player seems likely to overlook such pitfalls, you will probably win anyway — *so why risk fouling your development against what may turn out to be an alert adversary?* Playing a few extra moves for the sake of soundness is surely a worthwhile investment.

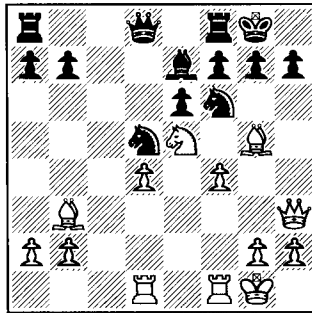
Choosing which lines to occupy is often difficult in the absence of a tactical motif. It is sometimes helpful to analyze

from the opponent's viewpoint. Alekhine himself took this advice literally when he would look at the position while standing behind the other player's chair. Not only would this technique help improve his opponent's composure, it just might have given Alekhine a sporting chance to see more objectively. There's nothing like discovering an enemy threat to enliven the game. So if you have trouble finding a move, look at the board as if you were the opponent. You may be surprised at what you find.

SUPPLEMENTAL GAMES AND EXERCISES

Botvinnik—Vidmar, Nottingham 1936

1. c4 e6 2. Nf3 d5 3. d4 Nf6 4. Nc3 Be7 5. Bg5 0-0 6. e3 Nbd7 7. Bd3 c5 8. 0-0 cxd4 9. exd4 (9. Nxd4 Ne5) **dxc4 10. Bxc4 Nb6** (10... a6 11. a4 Nb6) **11. Bb3 Bd7 12. Qd3 Nbd5** (12... Nfd5 13. Bc2 g6; 13. Ne4 Ba4) **13. Ne5 Bc6 14. Rad1 Nb4** (14... Qa5 15. Bc1 Nxc3 16. Nxc6 bxc6 17. bxc3± — Botvinnik; 14... Rc8 15. Qh3 Nxc3 16. bxc3 Be4 — Alekhine) **15. Qh3 Bd5 16. Nxd5 Nbx d5** (16... Nfxd5 17. f4 f5; 17. Bc1 Rc8±) **17. f4.**



Question: Can Black play 17... Ne4, intending 18... Bxg5 or 18... f5?

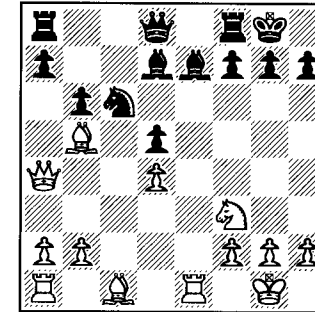
ANSWER: No. 17... Ne4 18. Nxf7:

- 1) 18... Rxf7 19. Qxe6;
- 2) 18... Kxf7 19. Rde1 — Botvinnik.

17... Rc8 (17... g6 18. Bh6 Re8 19. Ba4) **18. f5 exf5** (18... Qd6 19. fxe6 Qxe6 20. Qf3) **19. Rxf5 Qd6** (19... Rc7 20. Rdf1 a6 21. Nxf7; 20... Nb6 21. Qh4 Nbd5 22. Nxf7 Rxf7 23. Bxd5 Nxd5 24. Rxf7 Bxg5 25. Qxg5 — Panov) **20. Nxf7 Rxf7 21. Bxf6 Bxf6** (21... Nxf6 22. Rxf6) **22. Rxd5 Qc6 23. Rd6** (23. Rc5?) **Qe8 24. Rd7, 1-0.**

Botvinnik—Alekhine, AVRO 1938

1. Nf3 d5 2. d4 Nf6 3. c4 e6 4. Nc3 c5 5. cxd5 Nxd5 6. e3 Nc6 7. Bc4 cxd4 (7... Nf6=) 8. exd4 Be7 9. 0-0 0-0 10. Re1 b6 11. Nxd5 exd5 12. Bb5 Bd7 13. Qa4.



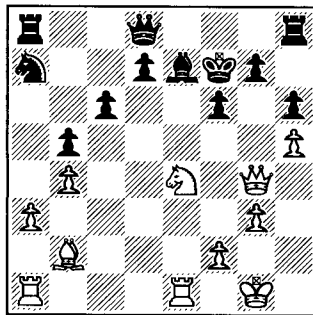
Question: How does White answer 13... Rc8?

ANSWER: After 13... Rc8, 14. Bd2! a6 (14... a5 15. Rac1) 15. Bxc6 Bxc6 16. Qxa6 wins. But 14. Bxc6 Bxc6 15. Qxa7 Bb4 and ...Ra8 gives White a headache.

13... Nb8 14. Bf4 Bxb5 15. Qxb5 a6 16. Qa4 Bd6 17. Bxd6 Qxd6 18. Rac1 Ra7 19. Qc2 Re7 20. Rxe7 Qxe7 21. Qc7 Qxc7 22. Rxc7 f6 23. Kf1 (23. Rb7 Rc8 24. Kf1 b5) **Rf7 24. Rc8† Rf8 25. Rc3 g5** (25... Nd7 or 25... Re8, 26. Rc7) **26. Ne1 h5 27. h4 Nd7** (27... Kf7 28. Nf3 g4 29. Ne1-d3-f4) **28. Rc7 Rf7 29. Nf3 g4 30. Ne1 f5 31. Nd3 f4 32. f3 gxf3 33. gxf3 a5 34. a4 Kf8 35. Rc6 Ke7 36. Kf2 Rf5 37. b3 Kd8 38. Ke2 Nb8 39. Rg6** (39. Rxb6 Kc7 and ...Nc6) **Kc7 40. Ne5 Na6 41. Rg7† Kc8 42. Nc6 Rf6 43. Ne7† Kb8 44. Nxd5 Rd6 45. Rg5 Nb4 46. Nxb4 axb4 47. Rxh5 Rc6** (47... Rxd4 48. Rf5 Kb7 49. Rf6 and 50. h5) **48. Rb5 Kc7 49. Rxb4 Rh6 50. Rb5** (50. Kd3 Re6) **Rxh4 51. Kd3, 1-0.**

Kasparov—Andersson, Tilburg 1981

1. d4 Nf6 2. c4 e6 3. Nf3 b6 4. a3 Bb7 5. Nc3 Ne4?! 6. Nxe4 Bxe4 7. Nd2 Bg6 8. g3 Nc6?! (8...c5!? then ...Nc6) 9. e3 a6 10. b4 b5 11. cxb5 axb5 12. Bb2 (12. Bxb5 Nxb4) Na7 (12... Rb8) 13. h4 h6 14. d5 (played before ...c6) exd5 15. Bg2 c6 16. 0-0 f6 17. Re1 Be7 18. Qg4 Kf7 19. h5 Bh7 20. e4 dxe4 21. Bxe4 Bxe4 22. Nxe4.



Question: Analyze both 22... Re8 and ...Rf8.

ANSWER:

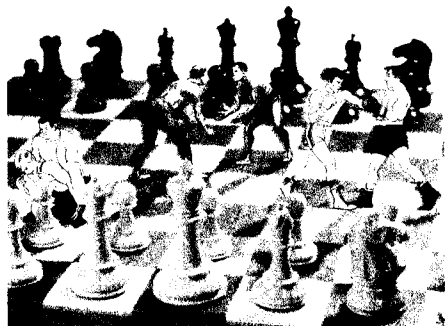
1) 22... Re8 23. Qxg6†: a) 23... Kf8 24. Ng5 hxxg5 25. h6 gxh6 26. Rxe7; b) 23... Kg8 24. Bxf6 Bxf6 25. Nxf6†.

2) 22... Rf8 23. Qg6† Kg8 24. Ng5 hxxg5 25. h6 Rf7 26. h7†. Kasparov's moves are perfectly timed throughout.

22... Nc8 23. Rad1 Ra7 24. Nxf6 gxf6 25. Qg6† Kf8 26. Bc1 d5 (26... Qe8 27. Bxh6† Rxh6 28. Qxh6† Kf7 [28... Kg8 29. Rd4 f5 30. Qg5†] 29. Rd4 Qg8 30. Qe3 Qg5 31. Qf3 and 32. Rg4) **27. Rd4 Nd6 28. Rg4 Nf7 29. Bxh6† Ke8** (29... Nxxh6 30. Qg7†) **30. Bg7, 1-0.**

Botvinnik—Petrosian, Moscow (8), 1963

1. d4 d5 2. c4 dxc4 3. Nf3 Nf6 4. e3 e6 5. Bxc4 c5 6. 0-0 a6 7. a4 Nc6 8. Qe2 Be7 9. dxc5 Bxc5 10. e4 Ng4 11. e5 Nd4 12. Nxd4 Qxd4 13. Na3 Bxa3 14. Rxa3 Nxe5 15. b3 Qc5 16. Ra2 Nxc4 17. bxc4 Bd7 18. Ba3 Qf5 19. Rd2 Bc6 20. Re1 h5 21. Qe3 f6 22. Qxe6† Qxe6 23. Rxe6† Kf7 24. Re7† Kg6 25. a5 Rad8 26. Bd6 Rhe8 27. Rxe8 Rxe8 28. f3 Re1† 29. Kf2 Ra1 30. Bb4 Rb1 31. Ba3 Rb3 32. Bd6 Rc3 33. Rd4 Rc2† 34. Kg3 Bd7 35. h4 Be6 36. c5 Bc4 37. Kf4 Bb5 38. g4 Rc3 39. Re4 Bc6 40. Re3 Rc4† 41. Kg3 Ra4 42. Bc7 hxxg4 43. fxg4 Bd7 44. Bf4 Kf7 45. Rb3 Bc8 46. g5 fxg5 47. hxxg5 Rxa5 48. Be3 Kg6 49. Rb6† Kf5 50. c6 bxc6 51. Rxc6 Ra3 52. Rc5† Kg6 53. Rc6† Kh5 54. Kf4 Ra4† 55. Kg3 1/2-1/2.



7: Schematic Thinking Introduction

Attack and Defense

Because simply adding up tactical lines fails to adequately describe a position, a **schematic** is needed. *The search for specific lines should be guided into predetermined areas.* For example, if you believe that your positional edge entitles you to a kingside attack, direct your analysis toward finding and destroying the weakest point of the castled position.

In order to guide the tactical search, a framework or tentative plan is helpful. Essentially, this means that you draw up a “wish list” containing plausible piece setups. Recall the Portisch—Fischer game (page 92) in which both players fought over c5. White’s scheme, Na4-Qe3-Nb3, was opposed successfully by Black’s Bf8-Qa7-Ne6. Calculation showed that Fischer’s plan was more concise. In general, then, the process begins with an objective achieved by a particular scheme, which is finally checked tactically. The following sections are devoted to schematic thinking in attack and defense, the ending, and during maneuvers.

A crucial underpinning to schematic thinking is Steinitz’s idea of the *balance of position*. Briefly, this means that material and positional advantages weigh against one another on a kind of scale. When enough of an edge accumulates, the scale is tipped decisively. But until the game is unbalanced, no attack or maneuver, however cunning, may succeed if the opponent plays correctly. He will be able to maintain the balance.

Hence, when considering a schematic setup, keep in mind how much advantage you are aiming for and on what basis your idea rests. These precautions help you avoid groundless plans. For instance, if your game seems won, ask yourself why

the opponent is defenseless and what sequence of moves constitutes the winning plan. *There is a great difference between an active, pleasant position with the initiative and a clearly won game.* Many pitfalls await the prospective victor.

Attack and Defense

The thought which gives life a combination is called the idea, the thought behind position play is called the plan.

— Lasker

Much has been written about attack, but rather little on defense. Attack is exciting and promising — defense seems dull and tedious. Yet for every attacker who enjoys the initiative, a dutiful defender must absorb the blows. So although superficially different, *attack and defense are really only two views of the same position*. This is a vital distinction, because an analyst considers both views when evaluating a game. That is the only way to reach an accurate appraisal.

Planning attack requires foresight; you must see ahead to a favorable position before committing yourself. Overlook a trifle, and the game is ruined. So first, the ability to calculate variations underlies attacking skill, the “intuitive” combination notwithstanding. As we stated earlier, training the mind’s eye is necessary to develop calculative ability.

Reliance solely on variations produces a style lacking in strategic vision. Transitions are missed, and planning becomes wooden. You tend to remain with plans that have already produced maximum concessions from the opponent. Therefore, balance between calculation and intuition is essential.

When defending, your goal is to find out whether the attack is truly dangerous. You need not analyze every line if the threats are strong — knowing that the attacking scheme must be countered is enough. For instance, if allowing the enemy Queen to invade the first rank results in several mate threats, you concentrate on ways to prevent that inroad, not on carefully counting the number of ways that the opponent can win.

Composure versus Panic

Psychologically, the defender must maintain his composure. Panic routs all orderly thought and ensures catastrophe; *experience shows that most games are lost by avoidable errors*, not won by brilliant play (although the most widely published specimens comprise many sacrifices). A study of annotations will confirm the resources of defense. The phrases “better was ...” or “the last chance was ...” often appear shortly before resignation. Had these opportunities been seized, many games could be saved.

Keeping your composure makes possible a stubborn defiance. By throwing every obstacle in the attacker’s path, you force him to think, you frustrate him by avoiding his traps. Once he knows that the game won’t win itself, that his initiative must still be turned to account, he often becomes demoralized — all that work and still no win! When the attacker realizes his day has just begun, be alert for inaccuracies and prepare for counterattack. The moment an error occurs, you should be ready for action.

Real versus Phantom Threats

Practical defense begins by separating real from mythical threats. A panic-stricken player invariably sees phantoms and reacts impulsively. So, accurately analyze the attack to know what you are up against. *One trump of the defender is his limited goal*: he need only find a single line that successfully holds. In contrast, the attacker must analyze and refute every reasonable defense — unless he speculates. Learn to punish such gamblers with precise tactics.

After appraising the attack, form a general plan. Threatened points may be guarded either directly or indirectly. Direct defense should be economical: protect the weakness securely, actively, and with the smallest concession available. Example: with Black’s pieces thus, K/g8, N/d7, Ps on f7, g7, h7, and mate threatened on the b1-h7 diagonal, look at the defenses.

1)Nd7-f6 is active, but may leave the Knight vulnerable to exchange.

2)Nd7-f8 is more secure, yet also more passive, because the Knight has no aggressive function.

3)g7-g6 leaves the Knight free at the cost of weakening f6 and h6. You choose among the possibilities to fit your general plan. For example, if White had sacrificed to obtain his attack position, the Nd7-f8 would concede little and would bolster the kingside. The material plus is equivalent to active counterplay here.

Counterattacks or Traps

Indirect defense means a counterattack or trap. **Counterattack** aims at the enemy’s weakest point. Sometimes this amounts to harrying various targets with petty threats; sometimes the weak point can only be reached after a few preparatory moves. Whether the target comes under pressure immediately or not matters little — you need to find the attack that causes the most trouble overall.

Because some players are loath to capture material if they must submit to a dangerous (but not necessarily strong) check or two, kingside attack attracts the counterpuncher. Realize that such operations take time to set up, and that indirectly guarded points often fall — deterrence doesn’t always work. For this reason, be ready to sacrifice for the sake of counterattack.

The Sicilian Defense commonly features indirect means of protecting weaknesses. For such play to succeed, Black must accurately weigh White’s initiative. Ideally, the counterblow falls just when the opponent’s forces are poised for attack and unable to guard their hinterland. Playing Black against *Tal* (Niksic 1983), *Lajos Portisch* demonstrates superb technique in defense.

1. e4 c5 2. Nf3 d6 3. d4 cxd4 4. Nxd4 Nf6 5. Nc3 a6 6. Bg5 e6 7. f4 Be7 8. Qf3 Qc7 9. 0-0-0 Nbd7 10. Qg3 Nc5 11. Bd3 h6 12. Bh4 0-0 13. Rhe1 Nh5 14. Qg4 Bxh4 15. Qxh4 Nxf4.

Judicious simplification to counter Tal's combinative tendencies; nevertheless, the former *Weltmeister* conjures some complications.

16. Qxf4 e5 17. Qh4 exd4 18. Nd5 Qd8 19. Ne7† Kh8 20. Rf1.

Tal intends 21. Rf6, then Rxh6†. Portisch uses the shaky state of White's Knight to develop his queenside pieces. The key to Black's counterplay is an Exchange sacrifice that eliminates the advanced Knight, thereby considerably slowing White's attack. In outline, the scheme is Bg4-Nxd3†-Rc8, but everything had to be calculated to the last detail.

20... Bg4 21. Rf6 Kh7 22. Rdf1.

On 22. e5† Nxd3† 23. Rxd3 dxe5 24. Rg3 g6, Black stops Rxh6† and threatens the Knight. After 25. Qxg4 Qxe7, 26. Rxd3 fails to topple the King.

22... Nxd3† 23. cxd3.

Even this needs to be foreseen: 23. Kb1 Ne5 defends.

23... Rc8†!

Not falling for a typical Tal pitfall: 23... Be2 24. Rxh6† gxh6 25. Rf6 Qc7† 26. Nc6, stopping the expected 26. Kd2 Qa5† and ...Qg5.

24. Nxc8 Qc7†.

The Queen must remain on a dark square for counterplay. This color-consciousness of the Queen occurs quite often.

25. Kb1 Rxc8 26. R6f2 Be6 27. Qh5 b5 28. Qd1 Qa5 29. b3 Rc3 30. Rxf7.

30. Rc2 leaves Black with the only winning chances after 30... b4. The passed c-pawn guarantees at least a draw. Observe how the loss of White's Knight affects the initiative: without the steed, Tal has no obvious way to continue his attack. A few moves would be required to regroup. But, having seen enough, Tal decides to force the draw.

30... Bxf7 31. Rxf7 Qa3 32. Qf1 Rc5 33. Rf5 Rc7 34. Qe1 Rc3 35. Qf1 Rc7 36. e5 Qc5 37. exd6, 1/2-1/2.

Portisch's sacrifice took the pressure off his kingside by destroying the key attack piece. Then his counterplay against White's King prevented Tal from getting a second wind.

The other form of indirect defense, **trap play**, relies on deception and deterrence. If the opponent is deceived, he captures material (or makes some other attractive move) and falls into the trap; if he sees the trap, he is deterred from attacking. Because it's less forcible, trap play lacks the initiative of counterattack and should be incorporated into a more positive strategy. Otherwise, your planning deteriorates, becoming scarcely more than a series of one-move threats. *Play solely for traps only as a last resort.*

In difficult positions, defense means postponing defeat; the longer your loss is delayed, the saving chances accumulate, because the opponent's opportunity to err increases. *The art of attack is a hard one to master*, so as a defender you often face a poor imitation: the attacker simply lays traps for you, without creating any **scheme** for victory. By sidestepping these snares, you may delay defeat until a draw appears. The importance of move-by-move defense can hardly be overstated.

The Playability of Inferior Variations

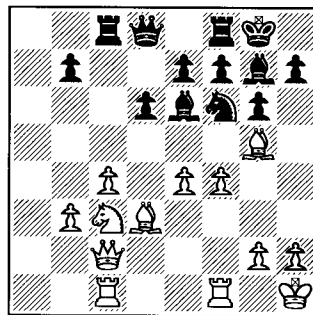
Besides postponing a loss, you have another weapon when pressed by difficulty: the playability of many inferior variations. The confident adversary wants to win easily and clearly. The type of plan he chooses indicates what he will "settle for."

Example: your opponent has passed up a **pawn-ahead** end-game in order to play for mate; this means that you may well offer to play those inferior endings. The opponent has implicitly said that a pawn up is not enough, he insists on more. Your new “minimum” is the level of disadvantage disdained by the enemy rather than formal equality. This psychological method of play can at least keep you in the game longer — and occasionally, it can save the game altogether.

Both attack and defense require analysis of the position. The attacking scheme and counterplan must be found by both players. *The following description roughly parallels the thinking process in attack.* An experienced player might omit some steps, but the attacking scheme is clearer if we assume no special skills and give the process explicitly.

The Process of Attack

1 When you think an attack is in prospect, the **first** step is to **find a target**. *Vaguely defined objectives hamper the assault*, so be precise. The weakness may be a square, a pawn, or piece. The attack should strike the weakest link of the defense, the point hardest to protect. (Though at times, when the defense stakes everything on one square, attack on a strong point can be effective. Recall Petroff’s Defense, wherein White battles to erase Black’s e4 grip.) As an example of the attack process, we turn to the game *Portisch—Reshevsky, Petropolis 1973*.



Black to Move

White’s kingside space edge confers chances for attack. The analyst’s job is to turn this abstract generalization into a concrete line of play. e7, f7, and h7 are possible targets; breaking through any of these points should give excellent mating prospects. **Note:** when pursuing the King, the attacker searches for squares on which to place his pieces to force mate. At this early stage, it doesn’t matter whether Black’s King is on g8 or h8 — we look for a weak point near the King.

2 This brings us to our **second** step: **reckon the amount of force required to break through**. A rather obvious idea, true, but one which indicates promising targets far in advance. For instance, h7 must be attacked twice and the f6-Knight removed for the attack to succeed; in contrast, f7 must be threatened by three pieces after both the N/f6 and the B/e6 are removed. Therefore, h7 seems the weaker square.

3 Our **third** analytic step is to **find the “path” of each attacking piece to the target**. e7 can be assaulted by 1. Nd5 2. Qf2 3. Qh4 4. e5; f7 by 1. Nd5 (to clear the f-file) 2. Rf3 3. Rcf1 4. f5 5. fxf6; h7 by 1. Qf2 2. Qh4 3. Rf3 4. Rh3.

This pathfinding process uncovers and confirms useful information. For example, it is clear that the N/f6 is the prime defender of Black’s kingside. It protects h7, masks f7 and e7. For any attack to succeed, that Knight must be driven off or captured.

We have already outlined the movements of White’s Queen and Knight. The Bishops seem well-placed presently, so let’s consider more carefully the Rooks and center pawns. Until we know which lines are to be opened by the pawn breaks, the Rooks are difficult to place. *This problem, knowing where the Rooks should go, is familiar to all players.*

If we choose f7 as our target, the pawn advance f4-f5xg6 will open the f-file. And if Black answers f4-f5 with g6xf5, the e-file opens. That looks promising. On the other hand, the alternate push, e4-e5, is less effective, because after d6xe5 f4xe5, f7 and e7 remain heavily protected. At this point we consciously downgrade e7 as the prime target because White’s

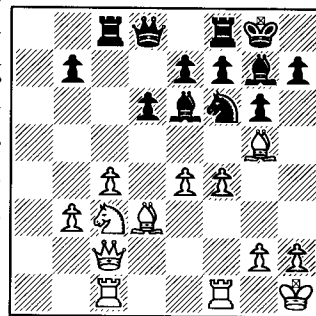
artillery cannot easily bear on it.

Assuming the Rooks maneuver according to the f4-f5 break, we double them on the f-file while eyeing h3 for attack on h7. Significantly, the pawns need not be touched until the Rooks settle in. *As a rule, play your least committal moves first: ideally, you reveal your true plan at the last moment.*

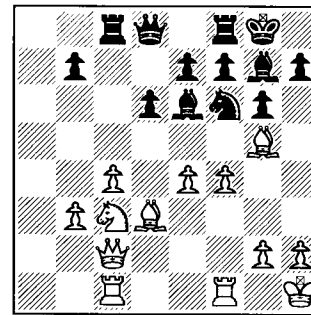
4 Thus far we have not thought of any defensive moves, simply because the attack scheme must be clear in your mind first. Otherwise, the analytic clutter can overwhelm you. Therefore, the **fourth** step is: **draw up a sequence of moves which overcome the weak point.** The skeleton of the attack should now be visible. In Portisch—Reshevsky, we might have 1. f5 2. Qf2 3. Qh4 4. Rf3 5. Rh3 6. Nd5 against h7, and 1. f5 2. Rf3 3. Rcf1 4. Nd5 5. Qf2 versus f7, although this fails to win outright. Recall step two above: now see the wisdom of schematically weighing the attacking chances. At each step, h7 grows more attractive as a target.

5 Concentrating on h7, we come to our **fifth** step: **find exact lines which incorporate the previous logical analysis.** The scheme against h7 can begin with a variety of moves. If we start with 1. Nd5, our Queen suffers. So either 1. f5, to reduce pressure on d5, or 1. Qf2, safeguarding the Queen, is plausible.

(As the diagram made clear, it's Black's move, and from his viewpoint we are in effect discovering the threat hierarchy of the position. If you were playing Black, the analytic process would commence with White to move — because he has the attacking chances. So we are examining the attack as a scheme [for White] and as a threat [to Black]. Both sides must analyze the h7 attack.)



Black to Move



Black to Move

Let's begin the attack with 1. f5 (more aggressive than 1. Qf2). Black can either play 1... Bd7 or 1... gxf5. The second looks suspect because more lines open up: 1. f5 gxf5 2. exf5 Bd7 3. Qe2 Re8 4. Ne4 Nxe4 5. Qxe4, intending 6. f6. White could also try 3. Qf2 with the follow-up 4. Qh4 5. Nd5 or 5. Rf3. We can therefore calmly dismiss 1... gxf5.

After the Bishop retreat (1. f5 Bd7), 2. Nd5 is logical. Look at the simple, direct scheme first. (In contrast, *when calculating sacrifices, look at the more violent moves first.*) Now 2... Nxd5 3. exd5 removes a key defender and opens lines. There are various ideas for White, but 4. Rce1 now seems a strong threat. For instance, 4... Re8 5. fxg6 fxg6 6. Bxg6 hxd6 7. Qxg6. Observe that we have not yet considered Black's third move, because we are still trying to determine whether White actually has a threat at all. *Only in response to a threat can a defensive move be contemplated; this point cannot be stressed enough.*

Following 1. f5 Bd7 2. Nd5 Nxd5 3. exd5 ... 4. Rce1 (our threat), 4... Be5, in place of 4... Re8, is interesting. Try to evaluate the position in your mind's eye after 5. Rxe5 dxe5 6. f6 e6 7. Qf2 exd5 8. Qh4 h5 9. cxd5 (or 9. Bxg6). Even if such direct attacks fail, White retains excellent chances.

Perhaps Black's safest reply on the third move would be 3... f6. But his game is clearly enfeebled, and we can sum up the first few moves: White can play 1. f5 Bd7 2. Nd5 with the idea 3. Qf2-h4, while Black cannot play 3... Nxd5 with any assurance. Notice in this line that we have "in passing" created the opportunity to double Black's f-pawns, producing an isolated d-pawn as well. Black must try to avert both threats; thus the simple 1. f5 and 2. Nd5 constitute a real danger.

6 Now it's time for the **sixth** step: **modify the attack to cope with changes in the defense.** Our last line, switching the attack to f6, is a good example of the multiple threats

the aggressor must use. *Single threats are usually not enough, for they give the defense time to react.* In the game, Black really has no way to stop White's scheme, so he seeks to slow down the attack by Bd7-c6xd5, eliminating the Knight. Then he plays his own Knight to f8 to avoid its exchange — there is no other way to guard h7. The actual game continuation shows how Portisch copes with this alteration of the defense.

7 Now that the attacking scheme is clear, we reach the **seventh step: reassess the position** based on the threats from the attack scheme. Black looks for a means of escaping White's pressure. We now revert to tactical analysis with Black to move, realizing that rapid counterplay is needed. Defensive prospects will be bleak in the absence of some counterthreats.

To start, Black has some play against c3, the focus of his Rook and Bishop. A hint of this threat was seen with the failure of 1. Nd5: the answer was 1... Nxd5 2. exd5 Bxd5. The c-pawn is pinned, and this suggests (using the game numbers) 17... b5 18. cxb5 Nxe4. Taking the idea further, we find 17... b5 18. Nxb5 d5 thematic although insufficient: 19. exd5 Bxd5 (or 19... Nxd5) 20. Qe2. White's central pressure and queenside majority are substantial advantages.

Still, the counterblow d6-d5 feels right. After all, *everyone knows the classical response to a wing attack — a thrust in the center!* The audacious push 17... d5, recommended by Benko, whose analysis follows, gave chances of drawing. For the sake of brevity, we present only his conclusions: 17... d5 18. exd5 (18. e5 dxc4) Nxd5 19. Nxd5 Bxd5 20. Qe2 Be6 21. f5 gxf5 22. Bxf5 Bxf5 23. Rxf5 Qd7 (or 23... Rc7) 24. Rd5 Qe6 25. Qxe6 fxe6 26. Rd7 b5 “with good drawing chances” (Benko).

The game continued instead **17... Qa5 18. f5 Bd7 19. Nd5 Qd8.**

White just gained two moves, a decisive shift in the balance of position. Portisch now plumps for the sequence 20. Qf2, 21. Qh4, 22. Rf3, 23. Rh3. Then h7 collapses. Reshevsky counters by playing 20... Bc6, 21... Bxd5, 22... Nd7, 23... Re8, 24... Nf8, ridding himself of the nettlesome Knight and covering h7. But of course White's plan is faster. Moreover, f7 is

weakened, Black's major pieces are sealed off from the battle, and, finally, the f8-Knight is still not safe from exchange. Particularly note the pin on the e7-pawn, which does the “sealing.”

Let's see how in the rest of the game Portisch completes his attack.

20. Qf2 Bc6 21. Qh4 Bxd5 22. exd5 Re8.

Obviously, answering Rf3-h3 with h7-h5 surrenders g6.

23. Rf3 Nd7 24. Rcf1.

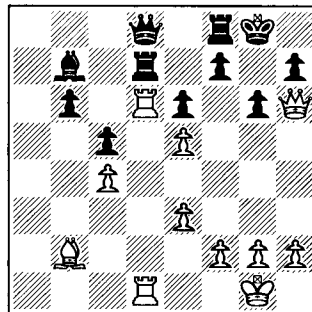
Portisch first increases the pressure before playing Rh3. Now he intends 25. fxg6 fxg6 26. Rh3 Nf8 27. Rxf8† Kxf8 28. Qxh7 with the threat 29. Rf3† Bf6 30. Bh6#. Try to refute all possible defenses in the position after 28. Qxh7. Then analyze the threat (after 24. Rcf1) beginning with 24... Nf8; analyze mentally before moving the pieces. You will see the defense becoming overloaded.

Reshevsky blocks the f-file, yet he's unable to protect both h7 and h8. There followed:

24... Bf6 25. Rh3 Nf8 26. fxg6 fxg6 27. Bxg6 hxg6 28. Rxf6, 1-0. Make sure you find the mate.

Portisch's attacking setup functioned quite smoothly after Reshevsky's 17th move. Usually, the defender is not so obliging, and instead of a single scheme the attacker tries two or three before overcoming the weakness.

An example of multiple schemes is found in *Taimanov—Averbakh, Zürich 1953*.



Again employing the schematic method, we start with the search for a target. An obvious soft spot is h7. And if we can open the long diagonal, the implications (g7) are clear to the naked eye. Focusing on h7 first, we need to add a Rook to the attack (Rh3). An obvious sequence is 26. e4 27. R1d3 28. Rh3. (In fact, White could have played similarly when he chose Ra1-d1 instead of e3-e4.) Other ideas, suggested by Bronstein, are e3-e4 with Bc1-g5-f6 or f2-f4-f5.

Considering specific lines, we must initially find a defense to the brutal 26. Rxd7; either exchange (25... Rxd6 26. exd6) or protection (25... Bc6). The *first* awakens the malevolent b2-Bishop, the *second* is flaccid with respect to e3-e4. Averbakh decided to exchange Rooks, block the long diagonal, and surround the advanced d-pawn. He plans 25... Rxd6 26. exd6 f6 and 27... Qd7, when he will begin to extricate himself.

In the position following 26... f6, Taimanov needs a new attacking scheme, since the Rook lift to h3 is parried by ...Qd7 or ...Rf7. The fresh idea is h4-h5xg6. But for it to work, Qd7-g7 must be prevented. On 27. d7 the pawn is indeed lost after 27... Bc6 28. h4 Bxd7 29. h5, but White has a threat to g6. Averbakh would have two choices, 29... g5 and 29... gxh5. Let's have a look:

a) 29... g5 30. Bxf6 Qxf6 31. Qxf6 Rxf6 32. Rxd7 exploits the overloaded Queen and wins for White. If 30... Rxf6, 31. Qxg5† Kf7 32. h6 e5 (32... Qe7 33. Rxd7) 33. Rd6 wins, according to Bronstein.

b) 29... gxh5 30. e4 (back to the old stand, angling for Rd3-

h3) e5 (covering the g-file but fixing a target on e5) 31. f4 Qe7 (31... exf4 32. Rd6) 32. fxe5 fxe5 33. Rd5.

This all looks grim for Black. Perhaps he can improve on 27. How about 27... Rf7? There could follow Bronstein's impressively thematic line 28. Qh3 f5 29. Qh6 Rxd7 30. Qg7†! Actually, after 27. d7 White threatens 28. Qxf8† Kxf8 29. Bxf6. The move 27... Bc6 neutralized this attractive possibility, for on Move 29 Black can play 29... Qxd7 (after 28. Qxf8† Kxf8 29. Bxf6). You may remember the threat hierarchy: *Find tactical threats first!*

In any case, the Queen sacrifice is an incidental point that gains time for the real schemes against the King to take effect.

Despite all this bad news, Black is not bereft of resources. From the diagram, after **25... Rxd6 26. exd6 f6 27. d7** Bronstein suggests 27... e5 as the most logical. Black prepares to play ...Qxd7 or ...Rf7, renewing his attack on d7. With the long diagonal closed, Averbakh has just enough time to parry the kingside attack.

A plausible line is: 27... e5 28. h4 (or 28. f4) Rf7 29. h5 Rxd7 30. Rxd7 Qxd7 31. hxg6 hxg6 32. Qxg6† Qg7 with the prospect of a draw. Thus the opposing schemes deadlock in honorable equality. The game concluded:

27... Bc6 28. h4 Bxd7 29. h5 gxh5 30. e4 e5 31. f4 (Bronstein christens this Taimanov's version of the King's Gambit!) **exf4 32. Rd6 Qe8 33. Bxf6 Rf7 34. Rd5, 1-0.** An attack displaying admirable persistence and imagination.

Time to recap the process of finding an attacking scheme. Though these steps often merge in practice, they are given discretely for clarity. We assume the attacker moves first.

The Attack Schematic

- 1) Decide on a point to attack.
- 2) Find what pieces and pawns are required to break through that point and which defenders must be removed.
- 3) Determine the path of each attack piece — don't include

any defensive moves, but be flexible; the scheme **should** be malleable.

4) Solve the weak-point problem by coming up with a sequence of moves.

5) Calculate lines of play that include defenses to the scheme. Try to find efficient refutations of your attack.

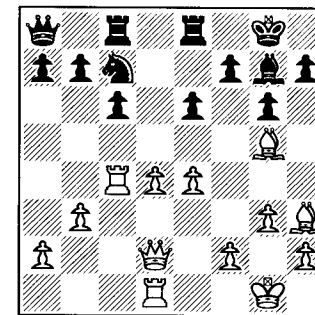
6) Modify the attack to cope with the new defenses. Try various move orders; add to or change the composition of the attack force.

7) Reassess the position, restarting the schematic process at whichever step required. Impose your will on the opponent. Choose a new target if necessary and go through the process again.

Using this method of analysis forces you to alternate between general and specific material: a scheme is invented, then a variation calculated, finally a new modification added. The process is natural because the eye cannot easily catch all the strategic and tactical ideas in a single pass. With each adjustment of the scheme, more of the position's secrets are revealed, giving you greater confidence in your analysis.

The Taimanov—Averbakh game illustrated White's dual attack plan: threats to h7 and promotion of the d-pawn. Frequently, such multiple schemes are needed to maintain the initiative. Commonly, a scheme encourages a defensive move which, nevertheless, thwarts your plan. Rather than continue with a plan which promises only diminishing returns, you start a fresh attack (see Move 31 in Taimanov—Averbakh). Ideally, the accumulation of advantages results in a decisive attack.

The point to watch for, naturally, is that **substantial concession**. Sticking with a plan too long is no better than abandoning it too soon. The next game includes some partially completed schemes, for attack and defense, that nonetheless work effectively.



In *Tal—Botvinnik 1960 (Game 11)*, Black suffers from lack of counterplay; he must reckon with possibilities of d4-d5 and e4-e5 as well as attacks on the King. Black's Rooks sit stifled, the e-pawn cannot move, and the Queen sulks in her room.

White has a pleasant game, but he needs a plan for attack; otherwise, as we all know from personal experience, the advantage inevitably wanders away. With such a central edge, Tal will seek a kingside target. f7 is a natural: the scheme Qf4, Rd3-f3, and Be7 (uprooting a R/f8 that might appear) strikes one as a reasonable starting place.

This scheme may not overwhelm Black, although the threats are serious enough. The central advances remain possible; in particular, the c-pawn is pinned after Qf4, so d4-d5 enhances the kingside attack as an incidental threat. Assuming White moves (in keeping with our method), we begin to develop an actual tactical line:

23. Qf4 Rf8 — a natural idea, protecting f7 and intending f7-f6. Now White can reply with 24. Be7, 24. Bf6, or 24. e5.

a) 24. Be7 Rfe8 25. Bd6 Nb5 26. Be5 Bxe5 27. Qxe5 Qb8 28. Qxb8 Rxb8 29. d5 Rbd8 is harmless to Black.

b) 24. Bf6 (threat: 25. Bxg7 Kxg7 26. d5 exd5 27. exd5 Nxd5 28. Qd4†) Bxf6 25. Qxf6 Rcd8 26. Bg4 (26. f4!?) Rd6 27. h4 Qd8 holds nicely.

c) 24. e5 Nd5 25. Qe4. White plans f2-f4, g3-g4, f4-f5 with a rolling kingside attack. Control of d5 is not enough compensation for Black.

Still, 24. e5 appears convincing: why did White lose a move

by allowing his Queen to be threatened? Why not 23. e5 immediately? Whether the opponent's Rook stands on e8 or f8 seems unimportant: and the N/d5 looks more like a well-placed spectator than the vanguard of counterattack. (You may care to challenge this generalization.) White's last move before the diagram was 22. Qe1-d2, which Tal labeled hackneyed and instead favored 22. e5 with possibilities akin to "c" above.

In view of this gathering turbulence, Black is obliged to form a counterplan. He would like to attack in the center, to meet the wing threats and tether White's Rooks. Yet without control of d8, the idea is impractical. Other plans spring from various pawn advances: c6-c5, e6-e5, and f7-f5.

The c-pawn push takes time to prepare (b6-b7, Nc7-a6, c6-c5), affects the kingside only obliquely, and may be answered simply by d4-d5. The second charge, with the e-pawn, also demands setup time (to unpin) and risks the same White reply, d4-d5.

The third pawn move, f7-f5, seems odd, even a trifle desperate. But its logic is clear: White's f7 scheme disappears along with the e4-pawn. Furthermore, White must forget any gradual advance on the kingside and fight in the center, where Black is better able to acquit himself.

If White plays (22... f5) 23. e5, he says goodbye to his kingside attack because any line opening takes too long. On 23. f3, Nb5-d6 awakens the defense. If 23. exf5 exf5 24. g4 fxg4 25. Bxg4 Nd5 (Tal) 26. Bxc8 Qxc8, Black's threat ...Qg4 grants equality at least. Switching move order in this last line gives 23. g4 fxe4 24. Re1 Nb5 25. Bf4 Rcd8 26. Rxe4 Nd6 27. Bxd6 Rxd6 and the weaklings at d4 and e6 glow with equal pride.

These lines show that after 22... f5, Black foils the e4-e5 attack and begins to challenge White's center. The Q/a8 must reenter the game, though, and this gives Tal time to stir up some trouble. The continuation was:

22... f5 23. Bh6 Bxh6 (confident that the unsupported Queen will soon retreat) **24. Qxh6 Re7** (24... fxe4? 25. Re1) **25. Re1 Rf8 26. Rc5 Qd8 27. Re5**

Ref7 28. Qd2 Qd6 29. Bf1 Rd7 30. exf5 Rxf5! 31. R5e4 (Tal offers as stronger 31. Rxf5 exf5 32. Bc4† Kg7 33. Qc3, "preserving a positional edge." Botvinnik's next move was played quickly because he had only nine minutes to reach the time control. 31... Rd5, swapping e6 for d4, draws; this would have completed Botvinnik's superb defense and vindicated 22... f5. Remember, the best compensation for weakness: an "exchange of prisoners.") **Rf6 32. h4 Kg7** (32... c5 33. Qg5 Rf5 34. dxc5 preserves the e6 delinquent) **33. h5 gxh5 34. Rh4 Kg8** (Here Tal mentions 34... h6 and says it "would have been more difficult to break through ...") **35. Bd3 Rg7 36. Re5 Rff7 37. Qh6 Qe7 38. R5xh5 Nd5 39. Qd2 Nf6 40. Rh6 Qd6** (40... Nd7-f8 was more stubborn) **41. Rf4 Qf8 42. Qe3 Nd5 43. Rxf7 Qxf7 44. Qe5 Nc7 45. Qc5** (Alternating threats in typical fashion; now 45... a6 46. Qb6 Ne8 47. Rxe6 is hopeless.) **Qf3 46. Bxh7† Rxh7 47. Qg5† Kh8 48. Qd8† Kg7 49. Rxh7† Kxh7 50. Qxc7† Kg6 51. Qxb7** and **1-0** in 72 moves.

In this game, the schemes of attack and defense are indistinct because of their even balance. The moment Tal began a threat to f7 (22. Qd2), Botvinnik responded with a counterblow in the center (f7-f5). Only Black's errors in time pressure allowed the second wave to break.

In summary, then, to play positions in which attack and defense are roughly balanced, you must be ready to abandon a scheme the moment it achieves maximum concessions. After the opponent compromises his game and substantially defends against your threat, you embark on a new plan. Otherwise, the attempt to finish the original attack costs you more than it does the adversary.

When attacking, create an orderly scheme containing various threats which stands up to reasonable defense. When defending, remain composed, analyze the attack, then choose the necessary countermeasures. Remember that *active defense*

is not always possible; sometimes you must simply protect what is attacked.

Much can be learned about schematic play from studying older games, roughly the period 1880-1920. You often see grandiose plans, executed with flawless logic. The clash of schemes is clear, because the loser is occupied with his own ideas and only defends when it's too late. Thus you see the entire development of each plan.

In more modern games (since 1950), schemes are sharper and more tactical. These plans guide play for a few moves, become obsolete, and must be replaced. Intuition, foresight, and imagination are demanded to knit together multiple schemes. Such fluency is usually called the skill of exchanging advantages. Fischer provides ample study material here.

Editor's Note: I asked Mark how we answer the inevitable question of retention, not repeating analyses, and finding good tactical possibilities *before* we are a master and he replied:

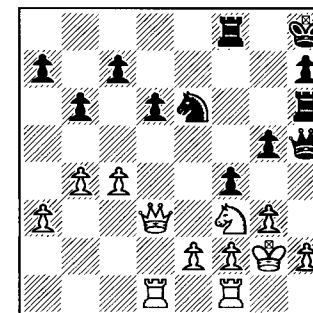
As with other disciplines, the process consists of emulating masters as best we can, examining the results, then trying to do better. What makes chess difficult is the intertwining of tactics and strategy. It's nearly impossible to find good tactics without understanding the whole position. Along with the methods advocated here, a player can use fixed opening systems (Colle, KIA, Bird, Benko) which provide a framework upon which to hang tactics. Also useful are exhaustive studies of 'typical positions' arising from favorite openings.

Regarding repeating analysis, Kotov's ideal "one line, one look" method may work in purely tactical situations—say, a King hunt—but it falls short when other positional elements are present; hence my iterative approach.

SUPPLEMENTAL GAMES AND EXERCISES

Miles—Korchnoi, Wijk aan Zee 1978

1. d4 Nf6 2. Nf3 e6 3. g3 b6 4. Bg2 Bb7 5. c4 Be7 6. 0-0 0-0 7. Nc3 Ne4 8. Qc2 Nxc3 9. Qxc3 f5 10. b3 Bf6 11. Bb2 Nc6 12. Rad1 (12. Ne5 Nxd4) Qe7 13. Qd2 Nd8 14. d5 Bxb2 15. Qxb2 d6 16. dxe6 Nxe6 17. b4 (17. e3) f4 18. Rd2 Rf6 19. Qc3 Raf8 20. a3 Qe8 21. Qd3 Qh5 22. Rdd1 Kh8 23. Nh4 Bxg2 24. Kxg2 (24. Nxd2 f3) g5 25. Nf3 Rh6.



DESCRIBE: Black's scheme after 26. Rh1 Qh3† 27. Kg1.

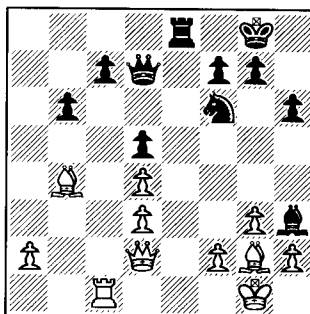
Give variations.

ANSWER: To clear the f-file Black exchanges on g3, plays g5-g4, then doubles Rooks and invades with his Knight: 27... fxg3 28. fxg3 g4 29. Nh4 (29. Nd2 Rhf6 30. Qc3 Nf4) Rhf6 30. Qc3 Nf4 31. Qe1 Qg2† 32. Nxd2 Nh3#.

26. h4 gxh4 27. Qc3† Kg8 28. gxh4 (28. Nxd2 Nxd4 f3† 29. exf3 Nf4† 30. Kh2 Qf5) Qg4† 29. Kh2 Ng5 30. Nxd2 f3 31. Qxf3 Rxd4† 32. Qh3 Qxd5, 0-1.

Pfleger—Korchnoi, Hastings 1971-72

1. c4 e5 2. Nc3 Nf6 3. g3 Bb4 4. Bg2 0-0 5. Nf3 Re8 6. 0-0 e4 7. Nd4 Bxc3 8. bxc3 Nc6 9. d3 exd3 10. exd3 h6 11. Re1 Rxe1† 12. Qxe1 Nxd4 13. cxd4 d5 14. Ba3?! Be6 15. Rb1 b6 16. Rc1 Qd7 17. Qd2 Re8 18. c5 Bh3 19. cxb6 axb6 20. Bb4.



Question: How does Black thwart White's c-file attack?

Threats are Qc3 and Bxh3.

Answer: Black's scheme is a King attack with Nh7-g5. Targets lie on d4, e2, f3, and h3. Study the game finalé.

20... Nh7 21. Bxh3 (21. Qf4 Ng5 22. Rxc7 Qa4 23. Qd2 Ne6) Qxh3 22. Rxc7 Ng5 23. Qd1 Ne6 24. Re7 Rc8 25. Bd2 Nxd4 26. Re3 h5 27. Qa4 Qg4 28. Kg2 b5 29. Qa6 Rc2 30. h3 Qf5 (33... Qg6) 31. Qa7 Nc6 32. Qa8† Kh7 33. Rf3 Qg6 34. Bf4 Nd4 35. Re3 Ne6 36. Rf3 h4 37. Qxd5 Nxf4†, 0-1.

8: Schematic Thinking—Endgame

To make effective use of a superiority in material is one of the most important things which a student has to learn. He cannot practice himself enough in it.

— Nimzovich

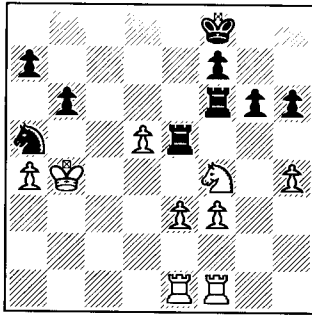


In order to illustrate the power of schematic thinking in the ending, consider for a moment the amount of material left on the board. In the opening, for instance, a Knight constitutes less than one tenth of your arsenal, according to the chess table of values. Following many exchanges, this ratio may climb to one third, in a position with a Knight and two pawns apiece. Upon reaching the endgame, then, each piece must assume a greater role in executing your strategy.

Who has not made the mistake of sending a minor piece on a faulty pawn hunt only to discover that the entire endgame has been spoiled? The “certain” pawn win proves chimerical; your Knight is abroad on a distant square, without material support. It takes two moves merely to get back where you started — alas, the win is gone.

There is no mystery to this if we think of the time lost and the proportion of our forces put out of play. For maximum effect, pieces and pawns should participate in a coordinated, gradual advance. If your forces are isolated or scattered, rally them into a unit. Look carefully before abandoning group cohesion for individual heroics.

Neglecting such a cohesive scheme led to defeat in *Ivkov—Larsen, Santa Monica 1966*.

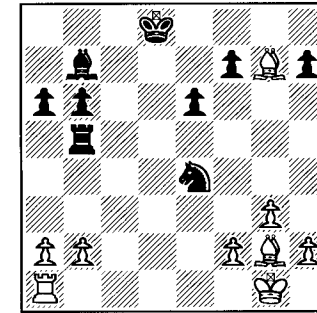


Admittedly short of time, Larsen passed up the natural 35... Nb7 36. Kc3 Nd6 — the ideal square — 37. Kd4 Re8 holding back the strong center pawns. The Danish GM then adds this probably drawing line: 38. Kd3 Nf5 39. Ng2 Ng3 40. Rf2 Ne4 41. R2f1 Ng3 with repetition. Risky would be 41... Nc5†, allowing the pawns to advance.

In that line, Black's pieces combine nicely to contain the pawn mass. Instead, Larsen tried **35... g5**, with the game ending **36. Nh5 Rd6 37. e4 f5 38. hxg5 hxg5 39. Ng3 fxe4 40. fxe4† Ke8 41. Nf5 Rg6 42. Rh1 Nb7 43. Rh8† Kd7 44. Rh7† Kc8 45. Ne7† Rxe7 46. Rxe7 g4, 1-0.**

Just as the aggressor unifies his forces to increase their effect, so the defender reacts with a scheme. He covers weaknesses actively while reserving chances for counterplay in the form of an attack or pawn advance. In this way the attacker is checked, his smooth development thwarted by continual skirmishing. And should the attacker slip, counterplay is ready.

In an example of a cool-headed defense, Black prevents the World Champion from landing the decisive blow (*Alekhine—Sultan Khan, Prague Olympics 1931*).



White's advantage consists of his superior pawn structure and two Bishops. Black responds by skillfully placing his already active forces. Sultan Khan uses the threat to swap Bishops (removing one of Alekhine's trumps) to centralize his pieces. White either concedes important lines or allows favorable trades. Thus Black prevents the space-gaining strategic scheme that is a key feature of the two-Bishop edge.

You may recall the Steinitzian method of using the Bishops:

- 1) with selected pawn advances, the opponent's minor pieces are restricted;

- 2) a weakness (either a pawn or misplaced piece) is fixed;

- 3) finally, the attacker simplifies and breaks through.

By keeping the Rooks on, and other active measures, Black never lets White restrict him or fix a weakness:

21... Nd6 (21... Nc5 boxes in the Rook: 22. Bf6† Kc8 23. Bf1 Rb4 24. a3 Rg4 25. Rc1. Here Black's forces do not cooperate.) **22. a4 (22. Rd1 Bxg2 23. Rxd6† Ke7 is equal) Rf5** (The defense perimeter is Black's fourth rank. 22... Rb3 restricts the Rook, and 22... Rb4 loses outright.) **23. Bd4 b5 24. Bf1** (Trading Bishops leaves the B/d4 with nothing to capture.) **Kd7 25. axb5 axb5 26. Be3 h5.**

Sultan Khan now has stopped the pawn moves f2-f3 and g3-g4 which would have constricted his pieces; he has also moved closer to eliminating the queenside pawns, a step to

further reduce the two-Bishop danger. For once **the play** is confined to the kingside, the Bishops' long range is not felt. Black's setup is at once safe and active: he holds his half of the board against gradual encroachment; the Rook avoids exchange and guards the sentinel pawns. Perhaps key to the scheme is the Knight — doubtless on its best square.

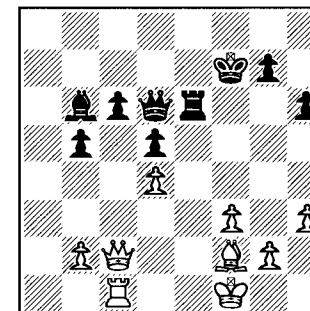
Attack on the a-file is precluded, f7 is guarded, and a frontal assault (Rd1, Bd5) leads to exchanges at best. In general, Black wants to trade Bishops and keep his Rook (to hold h5). To demonstrate this schematically, remove the light-square Bishops from the board. Black's troubles disappear. Now replace the Bishops and remove the Rooks — quite a different result in prospect! Back to the game:

27. f4 (Tartakower points out a threat: 28. Bh3 Rd5 29. Kf2 Rd3 30. Ke2 Rb3 [observe that Black improves with 30... Be4, holding comfortably] 31. Bd4, displacing the Rook. Actually, Sultan Khan intended 27... Bf3, smothering White's B/f1 and King. After 27... Bf3, 28. Ra7† Kc6 [or 28... Ke8] and 28. Bd3 Rd5 are ineffective.) **Be4 28. Ra7† Ke8 29. Kf2 Rd5** (Note the Rook's guardians, the B/e4 and the b5-pawn, which discourage the lurking f1-Bishop. Sultan Khan keeps his Rook happy along its narrow front.) **30. Be2 Bd3 31. Bf3 Be4 32. Be2** (Tartakower mentions 32. Ra8† Ke7 33. Rh8 Bxf3 34. Kxf3 Nc4 35. b3 Nxe3 36. Kxe3 Rc5 as equal: the wizard of attack stymied by cold-blooded centralization.), **1/2-1/2**.

The attacker never got his scheme emplaced. He resorted to separate tactical threats because Black's pieces interfered with White's strategy. Frequently, however, the player with the initiative tries one, then another plan in the effort to breach the defenses.

The attack's first wave disrupts the opponent rather than knocks him out; the second assault may not be so forgiving. Our next game shows *Lasker* applying the method of succes-

sive attack versus *Rubinstein* (Black), *St. Petersburg 1914*.



The battle began with a Ruy Lopez, Open variation, in which the World Champion crippled Black's queenside pawn majority (the backward c6) and tied down his heavy pieces. White wants to advance his own majority, but doing so would expose his King to a draft. Therefore, Lasker aims for a Queen trade. Then, with the board swept clean of danger, the King will boldly join the fight.

White's ideal scheme, without Queens, is to post the King at d3 and the Bishop at e5; the Rook then supports the advance f3-f4, g2-g4, f4-f5 creating a passed pawn. Under this plan d4 is safe, and should the B/e5 be exchanged, a strong pawn takes its place. Meanwhile, c6 remains weak and severely hampers Rubinstein's attempts at counterplay.

To implement his scheme, Lasker first must convincingly propose a Queen trade. He does this by attacking Black's King. Here is what might happen if Rubinstein avoids the exchange: 42. Qf5† Rf6 43. Qe5 Qd7 44. Bh4 Rf5 45. Qe3 Kg8 46. Bg3 Rf8 47. Be5, with an increasing spatial plus on the kingside.

Black agrees to swap Queens, but in return he demands a concession: the white Bishop must not take the pulpit (e5). Nevertheless, White makes progress because of Black's structural passivity, his weakling on c6.

42. Qf5† Rf6 43. Qe5 Re6 44. Qxd6 Rxd6 45. Ke2 Ke7 46. Kd3 Rg6 (Forcing g2-g3, for if 47. g2-g4, then 47... Rf6 48. Ke2 Re6† is unproductive.) **47. g3 Rf6 48. f4 Kd7 49. Re1.**

Lasker's new scheme consists of advancing his pawns as far as possible without tying himself down to their defense. Then his Rook can harry Black's pawns, and later the majority will render a passed pawn. It is not quite clear this should win, but neither is Black's drawing line apparent.

49... Rf8 50. Ra1 h5 51. Be3 g6 52. Rf1 Kd6
(on 52... Ra8, 53. f5 Rf8 54. fxg6.) **53. g4 hxg4 54. hxg4.**

Time again to reckon up. Black's pawn majority still rests, awaiting orders; c6-c5 at any point grants White an outside passed pawn: 54... c5 55. dxc5† Bxc5 56. Bxc5† Kxc5 57. f5. Then Black faces a grim choice, either allow the pawn to advance or the King to invade. There could follow 57... gxf5 58. gxf5 Rf6 59. Rf4 b4 60. b3 and the white King reaches d4 triumphantly.

Still, Black need not push the c-pawn. Perhaps a quiet move suffices? Say, 54... Rf7 55. f5 gxf5 56. gxf5 Kd7 — avoiding 57. Bf4† and 58. Be5. The f5-pawn needs additional protection, maybe by a lengthy royal march to f4. Even so, Black looks all right.

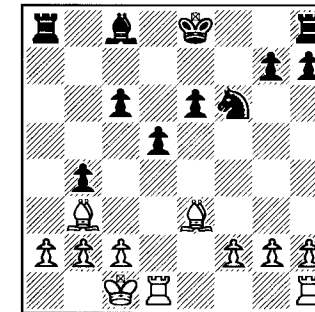
Is all well then? No, Lasker really threatens to probe another weakness with 55. Rh1-h6. A possibility is 55. Rh1 Ke6 56. Rh6 Kf6 57. f5. White has shrewdly freed his Rook for attack without allowing counterplay.

Black can stop 55. Rh1 with 54... Rh8 gaining counterplay: 55. f5 gxf5 56. Rxf5 Bd8 57. Bf4† Ke6 58. Be5 Rh4. Repeated exchanges have stymied Lasker's scheme.

Rubinstein lost patience, however: **54... c5 55. dxc5† Bxc5 56. Bxc5† Kxc5 57. f5 gxf5 58. gxf5 Rf6 59. Rf4 b4 60. b3 — zugzwang — Rf7 61. f6 Kd6 62. Kd4 Ke6 63. Rf2 Kd6 64. Ra2 Rc7 65. Ra6† Kd7 66. Rb6, 1-0.**

Let's recap the events of this battle. Initially, the black pieces were tethered to c6. Then a threat of attack led to the exchange of Queens. With the Be5 plan halted, Lasker cautiously advanced his pawns, keeping everything protected to inhibit counterplay. Finally, threats of Rook invasion and the march of the pawn encouraged the decisive error. As so often, the *leitmotif* of Lasker's play was pawn structure. He created a passed pawn, while his opponent could not.

A more complicated ending, with several motifs, appears below. White's strong Bishops, secure pawns, and superior development stand against Black's pawn mass.



Yates—Em. Lasker, New York 1924

Based on sheer number of advantages, White ought to be doing well. Apparently, he should use his mobile forces to attack the unwieldy pawn army. Looking closer, we see two unguarded black pawns (b4, c6) and several anemic dark squares. The most obvious target available is b4, although protection of e4 must preface Bc5.

Playing to blockade the e6-pawn in Nimzovich style, Bd4, f2-f4, Rhe1, fails to control c5 and e4. Black exploits these drawbacks with a timely ...Ne4. The failure of the attack on e5 indicates that the struggle over c5 is crucial. White must somehow restrain c6-c5 or go over to a dismal defense.

Returning to the Bc5 idea, observe the need for f2-f3 (19. Bc5 Ne4). A schematic approach suggests 19. f3 20. Bc5 21. Rd4 or 21. Rhe1. The threat to b4 gains some time and en-

courages undeveloping moves such as ...Nd7 and ...Rb8. White's intentions become clearer; the "strong Bishops" and "superior development" taken on a more concrete meaning.

Meanwhile, Black is not asleep. He will try to complete his mobilization and smother the Bishops. A plausible plan is ...0-0, ...Bd7, ...Rfc8, ...c5. (Note that the obvious ...Ba6 leaves c6 and e6 exposed while affecting White but little). One drawback to this scheme is the blockage of d7, denying the Knight a fine square for guarding the sensitive central points.

Trying to remedy this defect by modifying the sequence, ...0-0, ...Nd7, ...c5, runs into a nasty retort: 18... 0-0 19. f3 Nd7 20. Rhe1 c5 21. Rxd5 exd5 22. Bxd5†. Certainly a clear example of piece pressure. Moreover, White can insist that Black delay castling: 18... 0-0 19. Bc5 Rf7 20. Bxb4 Ne4 21. Rhe1 Nxf2 22. Rd4 and 23. c4. This line gives White freedom to maneuver, so Black might want to begin with 18... Bd7 or 18... Nd7 instead of 18... 0-0.

After 18... Bd7 19. f3 Black castles, answering 20. Bc5 with 20... Rfb8. Then both sides finish their schemes in the possible line 21. Rhe1 (21. Rd4?! Rb5 22. Bxb4 c5) Ra5 22. Bd6 Rb7 23. a3 bxa3 24. Bxa3 c5, leading to Black's advantage. White definitely needs some additional threat or refinement.

A reasonable idea after 18... Bd7 is 19. Bc5 Ne4 20. Bd4 0-0 21. f3 Nf6 22. c4 bxc3 23. bxc3, seeking to open the game for the long-legged Rooks and Bishops. Though the King may become exposed, the enemy minor pieces stand far away. You might like to examine this position after 23. bxc3: White will exchange his c-pawn while protecting his King with those active pieces; Black will aim (still) to push his c-pawn.

In view of White's insistence on opening the game, which must be opposed, Black can again try the scheme ...0-0, ...Nd7, ...c5 with a vital change. Instead of playing 20... c5, falling into the trap, he substitutes 20... Ra6. The Rxd5 combination is foiled, and White must counter the threat c6-c5-c4. In fact, this was Lasker's continuation. Let's now look at the game.

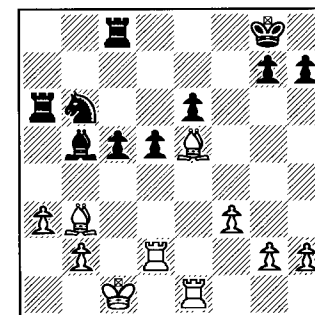
**18... Nd7 19. Rhe1 0-0 20. f3 Ra6 21. Bd2 c5
22. c4 bxc3.**

Here, you can appreciate the depth of White's plan if you analyze what happens when Black plays 22... Nb6. Seemingly, with c4 conquered, Lasker would seize the initiative. But the answer 23. cxd5 exd5 24. Bg5 c4 25. Bc2 Rxa2 26. Be7 wins back the pawn. Once more the better development and lively Bishops upset the siege; the pawn army advances, yet fails to crush the enemy.

(By the way, 22... d4 would be met with Re2, Be1-g3, Rde1. The d-pawn constitutes no immediate danger, whereas the e-pawn is backward.)

In the game, Lasker avoided premature clarification and Yates unexpectedly became careless:

**23. Bxc3 Nb6 24. a3 Bd7 25. Be5 Rc8 26. Rd2
Bb5.**



Alekhine opines that Lasker's pawn mass gives Black the better game, an advantage squandered because of the slow maneuver initiated by 26... Bb5. You may care to test the annotator's assertion and search for another approach.

**27. f4 Bc4 28. Bc2 d4 29. f5 Nd7 30. fxe6 Bxe6
31. Bg3 Nf8 32. Re5 Rb6 33. Bh4 Bf7 34. Bg3
Bg6 35. Re7 Re6 36. Rxe6 Nxe6 37. Bxg6 hxg6.**

Now White can draw by eliminating the d-pawn. Alekhine recommends a straightforward scheme — Bf2, Kc2-d3, b4. Analyze this idea, and try to maintain Black's d-pawn. See how Yates delayed this attack on d4 and thereby allowed Lasker

to bring up his King and Rook.

38. Be5 Rf8 39. b3 (39. b4 Rf5 40. Bg3 c4) **Rf1†**
40. Kc2 Kf7.

White draws easily, according to Alekhine, by playing the King to d3 on this or the next move.

41. Bg3 Ke7 42. a4 Kd7 43. Kd3 Rc1 44. Rc2
Rb1 45. Kc4 Kc6 46. Re2 Rc1† 47. Kd3 Rc3†
48. Kd2 Kd7 49. b4 cxb4 50. Kd1 b3 51. a5
Nc5 52. a6 Na4 53. Re5 b2, 0-1.

In the analysis of this game, the point to understand (with respect to schemes) is that *general descriptions of a position must direct the search for moves*, not substitute for those moves. The opposing schemes should be tested against one another. Once the plan is tested, its failings are exposed, and you can modify it and try again.

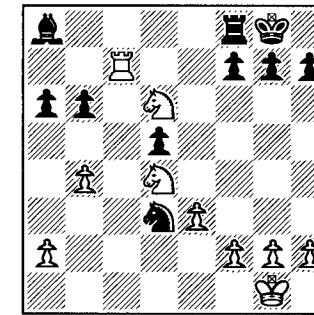
Examine Your Plan Constantly

In tournament play, examine your plan at each move, checking for miscalculations. *Generally it is unwise to play out several moves without pause*, even if those moves follow your scheme precisely. *Recheck your intended line — it's worth the time to ensure accuracy.*

In the endgame, because of the limited material, arrange your pieces into a cohesive unit. That way, your pieces yield maximum benefit from minimum resources. *Aim for a scheme that focuses on critical squares*, whether for attack, defense, or the advance of pawns.

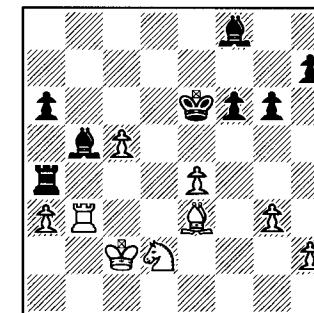
Before entering the endgame, try to have a concrete plan for winning or drawing. Many apparently easy wins are in fact difficult to achieve. So discover the opponent's scheme and look for ways to preempt it. Prepare yourself for the middle-to-endgame transition. The extra alertness will help prevent many errors resulting from inertia.

EXERCISES



FASHION A PLAN: White has several plusses: an active Rook and Knight at d6, Black's passive Bishop and blocked, isolated d5-pawn. Fashion a plan from this material, focusing on Black's weakest point, whatever that may be.

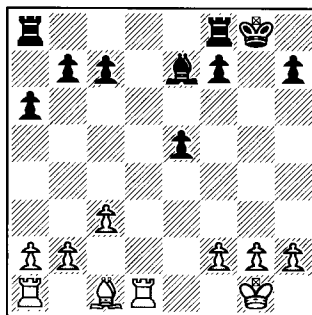
ANSWER: Alekhine—Cukiermann, Paris 1933: the stalemated Bishop is the prime objective; the scheme is Ra7 and Nc8-b6. **24. Nc8** (too slow is 24. a3) **Nxb4 25. Nxb6 Rb8 26. Nd7 Rd8 27. a3 Nd3 28. Ra7 Rc8 29. Kf1, 1-0.**



ASSESS/POINT/COUNTER: Black played 47... f5. Assess this move, its point, and how White should counter.

ANSWER: Korchnoi—Karpov, 1974 (11). This was a poor move; it rids White of a weak pawn and frees his King and Rook. Opening the game actually favors White. The game went 48. exf5† gxf5 49. Bf2 Bg7 50. Re3†, and after some checks White played 54. Kb3, soon putting Black in danger. Karpov was able to draw by inventive play, however. Timman suggests Black's

correct move was 47... Bg7 with a balanced position, as White can undertake little against the Bishop's zealous crossfire.



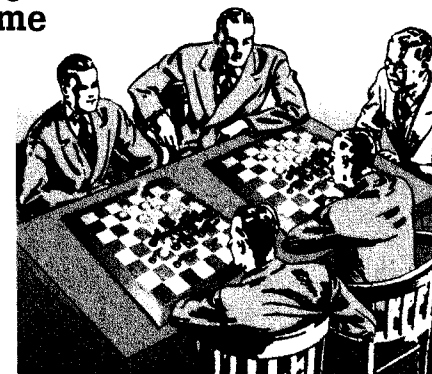
QUESTION: Black, playing to win, must push his pawns and open lines for his Rooks. After ...Rfd8, though, where does his King go?

ANSWER: Znosko-Borovsky—Alekhine, Paris 1933. Following the Rook swap, Black placed his King on e6: ...Rfd8, f7-f5, Kf7-e6, Bd6 led to a classic Alekhine victory. See his *My Best Games* for the instructive conclusion.

9: Schematic Thinking—The Maneuvering Game

After analysis of the so-called technical games of Capablanca and Smyslov, I concluded that they are based on the combinative element and on far-seeing and accurate analysis.

— Bronstein



In a war of movement, it is essential to guard against surprises. Before deciding on a strategic maneuver, you should be certain that no immediate dangers (or opportunities) exist. By overlooking such precautions, you may face unpleasant threats during regrouping, when you are least prepared. Therefore, *a thorough analysis is the necessary prelude to a maneuvering game.*

As Tartakower put it: Tactics is knowing what to do when there is something to do; strategy is knowing what to do when there is nothing to do. Make sure that there is “nothing” to do before you decide on maneuvers.

After finding no tactical motif, you then draw up a *scheme to guide your play*. The setup should contain various attacking prospects; schemes based on single tactical threats (that is, traps) are more easily repulsed and can lead to a strategic impasse. When in doubt, pass up *committal moves* in favor of the sound, *necessary move*. In general, place your forces centrally, if possible, ready to switch from attack to defense rapidly. Coordination, King safety, and sound pawn structure are the watchwords.

Maneuver centers first on preventing the opponent from carrying out his ideas — to parry his attack, to stop or delay his pawn advances, to restrict his movement, and so forth. Only

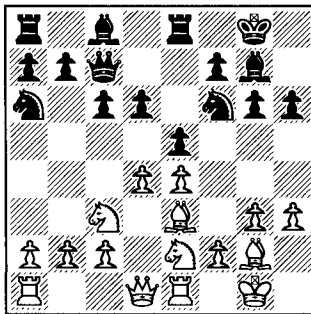
when the enemy cannot act decisively may you slip in a move or two of an offensive scheme — then it's back to prevention. *Whenever you force the adversary to regroup, you gain time for advancement or consolidation.*

The *aggressive side to the scheme* involves a gradual accretion of threats. As the scheme develops, the tactics and layout of your forces become more specific. Ideally, as you emplace the last piece your attacking potential explodes and overwhelms the unsuspecting defender. The purpose of quiet play is to gain advantages which later are exploited via combination.

Stealth is achieved by flexibly posting the pieces to disguise your intentions. In quiet positions, too much clarity aids the defense, because the defender knows more certainly where and how the blow will fall. Therefore, the required positional moves come first, saving the most committal steps till after the strategic foundation has set.

For a concrete discussion, let's turn to an example from tournament play (Karpov—Timman, Montreal 1979).

1. e4 d6 2. d4 Nf6 3. Nc3 g6 4. g3 Bg7 5. Bg2 0-0 6. Nge2 e5 7. 0-0 Na6 8. Re1 c6 9. h3 Re8 10. Bg5 h6 11. Be3 Qc7.



Karpov mentions in the tournament book that there is no need to determine the Queen's position so early: "Black should perhaps have restricted himself to the prophylactic 11... Kh7 — since all the same this move will have to be made sooner or later!"

Note also the typical preventive move 9. h3 and the provocative 10. Bg5, with its implied threat 11. Qd2, which encouraged the small weakness to appear on h6. Karpov's next few moves centralize his game. After that, he will decide on a specific scheme.

12. Qd2 Kh7 13. Rad1 Bd7 14. g4.

Again demonstrating the value of making necessary moves first. The immediate 14. f4 neither threatens nor consolidates: "It would be illogical to increase the tension right away... White will subsequently have to play g3-g4, so why not first utilize a resource for strengthening the position, such as g3-g4 and Ng3." (Karpov.) The e-pawn is protected further before action (f2-f4) is taken.

14... Rad8 15. Ng3 Bc8 16. f4.

White's space advantage hems in Black's pieces. Timman has no play in the center and finally resorts to a desperate wing attack. Black's N/a6 is badly placed, since e5xd4 (surrendering the center) is the price paid to clear c5. But if Timman does nothing, Karpov quietly tightens his grip without any concessions: 17. Qf2 is a plausible way. a7 comes under indirect fire, the Queen stands safer, and a further advance by g4-g5 is possible. Notice that the secure e-pawn allows White's pieces to attack on the kingside, for instance, 17. Qf2 b6 18. dxe5 dxe5 19. f5 g5 20. Bf3 Rh8 21. h4 gxh4 22. Nf1.

16... b5 17. a3 b4.

This move breaks up Timman's pawns, favoring White in the endgame.

18. axb4 Nxb4 19. Nce2.

According to Karpov, Black's scheme, a7-a5, Ba6, e5xd4, and c6-c5, is refuted quite simply. Instead of Timman's next,

19... a5 20. c3 and 19... c5 20. fxe5 dxe5 21. d5 were dismal for Black.

19... exd4 20. Nxd4 a5 21. c3 Na6 22. Qc2.

Again prevention, this time versus 22... Nc5 23. b4 Nb7 24. b5 cxb5 25. Nxb5 Qc4 26. Na7, aiming for 27. Bb6 Rd7 28. Bf1-b5. The e4-pawn is also covered once more.

22... Bd7 23. Nf3 (preparing to push e4-e5 and add c6 to the list of weaklings) **Re7 24. Bf2 Be8 25. Qd3 Qb7 26. Ra1.**

Black has guarded d6 and c6 with the Bc8-d7-e8 maneuver, but now a5 falls cleanly and the harvest begins.

26... Nc7 27. Rxa5 Rdd7 28. b4 Ne6 29. Be3.

Karpov warns that care is still required: 29. Qd2 d5 30. e5 Ne4 31. Nxe4 dxe4 32. Nd4 c5 “with complications;” the former World Champion always steered for clear waters in such positions.

29... c5 30. f5 Nd8 31. b5 Kh8 32. Bf2 Qc7 (32... Nxe4 33. Nxe4 and 34. Ng5†) **33. Ra4 Qb8 34. c4 Ra7 35. Rxa7 Rxa7 36. e5 dxe5 37. Nxe5 Ra2 38. Bxc5, 1-0.**

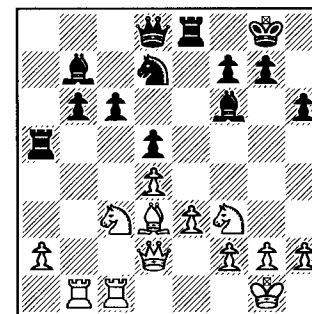
Karpov held firm his central space edge until Black lashed out with ...b5-b4. White’s d4-pawn *vis-à-vis* the N/a6 was perhaps key to the position. If Timman played 16... e5xd4, his game looked precarious; if he didn’t capture, he had no counterplay.

Superior pawn structure often confers the advantage in a maneuvering game. The better pawns secure your position, while the opponent’s weaknesses offer you permanent targets. Liberating pawn breaks are the bane of your “guaran-

teed” advantage: the opponent acquires open lines which can free his pieces. For this reason, your scheme normally should encompass most of the board, clamping down on the enemy. If the target is on a wing, the center and opposite side must be kept quiet. You have no time for subtle persuasion when the neighbors raise a fuss.

From *Petrosian—Spassky 1969 (Game 20)*, we get an example of the Armenian GM’s talent for producing crushing effects by apparently simple means.

1. c4 e6 2. d4 d5 3. Nf3 Be7 4. Nc3 Nf6 5. Bg5 0-0 6. e3 h6 7. Bxf6 Bxf6 8. Qd2 b6 9. cxd5 exd5 10. b4 Bb7 11. Rb1 c6 12. Bd3 Nd7 13. 0-0 Re8 14. Rfc1 a5 15. bxa5 Rxa5.



Perhaps Spassky was hoping with 14... a5 to lead the game along the lines of *Benko—Petrosian, Los Angeles 1963*. In that game, Black seized the initiative after White tried to maintain his pawn on b4 with a2-a3. Here (i.e., *Petrosian—Spassky*) the open queenside lines favor White, who can bombard the pawns on the clear files.

Generally, a fixed pawn center assists your calculation, because most attacks through the middle are discouraged. Long-range maneuver and planning become more reliable when the opponent’s options are thus reduced. In the diagrammed position, White’s solid d4-pawn weakens the effect of a possible c6-c5. The B/b7 is relegated to passive defense, and after c6-c5xd4 or c6-c5-c4 Black’s pawns are weaker. With no active breaks and no targets, Spassky must defend.

Petrosian's first target, b6, easily comes under fire from the open file, but the stalwart N/d7 prevents Rxb6. So the Knight must be removed. Observe that White can't simply play Na4, and that without a2-a4 Black will prepare b6-b5 and Nd7-b6-c4 — the winning plan in the cited Benko-Petrosian game.

Opposing Black's N/d7 will be Petrosian's Bishop or Knight. In either case, the threat to exchange should be executed only after the pressure is built up: 16. Bf5 Ra6 17. Bxd7 Qxd7 and ...Bd8 merely dissipates the edge White has.

Schematically, White intends something like this: preempt kingside counterplay with g2-g3 and h2-h4, double Rooks on the b-file, and play the Bishop to f5 or h3. In response, Spassky has several choices:

- 1) block the exchange with g7-g6 and f7-f5, which weakens Black's kingside;
- 2) defend b6 with the Bishop, which congests the position and tempts e3-e4;
- 3) exchange light-square Bishops, which secures b6 at the expense of c6. The second option possibly is best. Spassky decided on the logical trade of Bishops.

16. Bf5 Ra6 17. Rb3 g6 18. Bd3 (18. Bh3 Nf8 19. Rcb1 Qc7 20. Qb2 Bd8 leads to an impasse) **Ra7 19. Rcb1** (19. e4 c5 is unclear. Petrosian feels no need to give Black counterchances.) **Bg7 20. a4 Qe7** (20... Bf8-d6 looks more flexible) **21. Bf1 Ba6.**

This move forces White into a new scheme: double Rooks on the c-file, Qb3, and Nb4 or Nf4; the whole queenside will be threatened. Black's remaining "minor" guard at d7 cannot cover both c6 and b6.

22. h4 Bxf1 23. Rxf1 h5 24. Re1 (a feint) **Raa8 25. g3 Qd6 26. Kg2 Kf8 27. Reb1 Kg8 28. Qd1 Bf8 29. R3b2 Bg7** (perhaps heading for d8 or c7 was better) **30. Rc2 Ra7 31. Rbc1 Nb8 32. Ne2 Rc7 33. Qd3 Ra7 34. Qb3 Ra6** (no better was ...Rb7 because a later Nc5 wins) **35. Nf4 Rd8 36.**

Nd3 Bf8 37. Nfe5 Rc8 (The c-pawn is pinned, and the Knights charge into action.) **38. Rc3 Be7 39. Nf4 Bf6 40. Ned3** (40. Nxd5 Bxe5 is unclear, but now with the text Nb4 and Nxd5 are threats; examine the following combination, which had to be foreseen from at least this move.) **Ra5 41. Qxb6 Rxa4 42. Rc5 Ra6 43. Rxd5 Qxf4 44. Qxa6 Qe4† 45. f3 Qe6 46. Qc4 Qxe3 47. Ne5 Rf8 48. Rc5 Be7 49. Rb1 Bxc5 50. Rxb8, 1-0.**

Fundamentally, White controlled the game because Black had pawn weaknesses and no compensating counterplay. The rigid pawn center provided Petrosian the certainty he needed to proceed with a lengthy maneuver.

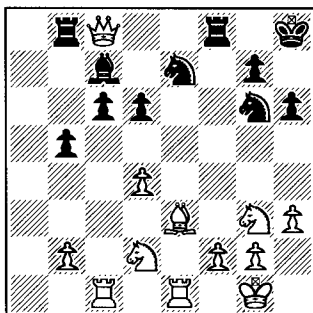
At several points during the game, you might ask whether another move would have saved Black. The answer is that Black had to play something, and whatever he played, the opponent would tailor his own plan to the new configuration. Spassky simply had no way to make Petrosian's edge disappear.

Steinitz's description is apt here: because positional evaluation is based on the weight of various objective factors, when the balance swings far enough to one side, the defender cannot (barring error) change the situation by willpower or cunning. The result turns not so much on this or that move as on the relative superiority of one set of pieces over another.

Quite often it's necessary to maneuver where coherent planning is difficult. The positional themes may be unclear or contradictory. In such cases, try to be especially rigorous, culling facts from the positional landmarks and fitting the information together. Take the time to ensure all the tactical mines have been cleared from the area.

The following vague position illustrates the tactics which underlie the schematic approach to maneuver. Our analytic method is that described in the chapters on *The Elements of Planning* (Chapters 4-6). The game was played in the return match for the World Championship between *Emanuel Lasker* (White) and *Wilhelm Steinitz* in 1896 (2).

1. e4 e5 2. Nf3 Nc6 3. Bb5 Bc5 4. c3 Nge7 5. 0-0 Ng6 6. d4 exd4 7. cxd4 Bb6 8. Nc3 0-0 9. a4 a6 10. Bc4 h6 11. h3 d6 12. Be3 Nce7 13. Re1 c6 14. Qb3 Bc7 15. Nd2 Rb8 16. Rac1 b5 17. axb5 axb5 18. Bd3 Kh8 19. Ne2 f5 20. exf5 Bxf5 21. Bxf5 Rxf5 22. Ng3 Rf8 23. Qe6 Qc8 24. Qxc8.



Before recapturing, Black had to consider a scheme on which to base his play. He wants to take with the right Rook. Let's have a try at evaluating the game.

The position might be called a Queenless middlegame. Employing the threat hierarchy, we first look for immediate tactical opportunities for both sides. After either Rook captures the Queen, there seem no direct dangers, no hanging pieces or pawns. The very absence of threats can make such quiet positions hard to assess.

The pawn structure should provide some clues: White's isolated d-pawn and Black's backward c-pawn attract attention. The holes at e6 and d5 beckon various pieces. So we have some plausible targets, though nothing is genuinely vulnerable as yet. Still, d5 looks like a fine post for Black's Knight, if he can move it there. For the moment, Steinitz's cavalry is rather boxed in.

The problem in moving the N/e7 to d5 is precisely the kind of task that a scheme can be designed to solve. After all, if Black can guard his pawns, a Knight on d5 is surely a basis for further advances. So our job becomes more specific: find a way to cover c6 so that the N/e7 may move.

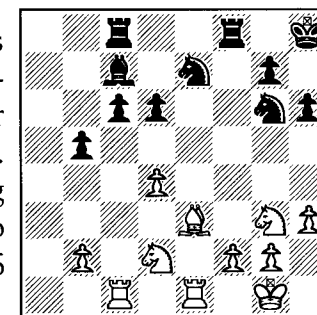
On general grounds, the recapture 24... Rbxc8 is the more active, since the R/f8 remains on station protecting f4 and f5. Taking with the other Rook is sensible if the R/b8 will then play to a8 — offhand, not an effective idea (...Ra8, Ra1). In any case, we need a Rook on c8. So let's begin with 24... Rbxc8.

The sequence ...Bb6, ...Nd5, and maybe ...Nge7 or ...Ngf4 is feasible. The difference between schemes for direct attack and for maneuver is in the degree of sharpness and exactitude of the threats. In a maneuvering game, you frequently must satisfy yourself with trifling advantages: here, the Knight is more effective on d5 than e7. The N/d5 carries no striking threat; nevertheless, it signals the beginning of a coordinated rallying of the pieces, the precursor of more insistent attacks.

Rather than hope for a quick win, the position player expects to outplay his adversary over many moves. In the diagrammed position, note that direct attack on d4 is as yet unprofitable because White can easily hold the pawn. No, this situation demands patience from both sides.

To counter Black's proposed scheme (...Bb6, ...Nd5, etc.), White considers two approaches. *First*, an attempt to frustrate the plan with pressure on c6 (Rc2, Rec1) or d6 (Nde4/Nge4). *Second*, a separate plan to exploit some other factor in the position, halting Black with a counterattack (h3-h4-h5). In this last suggestion, the aura Re1-e8 and the shaky state of the N/e7 give us the idea to remove the N/g6 sentry. Incidentally, the a-file provides White no help at present: 25. Ra1 Nd5 26. Ra7 Ngf4.

Taking the attempt to refute Black's scheme with 25. Rc2, we face the problem of increasing the pressure after 25... Bb6 26. Rec1. The solution is 27. Nde4; for instance, 26... Nf4 (hoping to settle on d5, completing the setup on schedule) 27. Nde4 Rcd8 28. Rxc6 is better for White.



Black prefers not to suffer passively: 25. Rc2 Bb6 26. Rec1 Rfd8 27. Nge4. *Analysis after 24... Rbxc8* Here White has more possibilities (Nb3 with Bd2-b4 and

g2-g3, h3-h4-h5) and stands marginally stronger. If Black modifies his plan — 25. Rc2 Ba5 26. Rec1 Nf4 27. Nde4 Bb4 — defense is simpler and more active, Black would be slightly better. Another alteration, 25. Rc2 Bb8 26. Rec1 (else 26... Nd5) Nf4 27. Nb3 Nfd5 28. Na5 Nb4, is playable.

Again, a different scheme for White, shown in the line 25. Nge4 Rfd8 26. g3 (stronger is Rc2) Bb6 27. h4 Nd5 28. h5 Nge7, is ineffective. Black's development impresses one with its dynamic compactness, whereas White's is rather static — an instance of how the isolated pawn affects strategy.

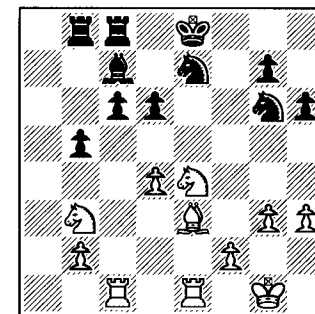
Finally, we look at the sharp try 25. h4. In practice, this line would be analyzed first because it's the most aggressive. Is the move actually dangerous? 25. h4 Nxh4 26. Bxh6 Nhf5 27. Bg5 Ba5 seems fine for Black. Ignoring the cheeky pawn push also suffices: 25. h4 Ba5 — remember: try all move orders! — 26. h5 Nh4 or 26... Nf4. We may conclude that 25. h4 is harmless, although the idea of uprooting the N/g6 demands attention.

The players would keep this threat in mind during the next few moves, for the h-pawn advance may prove dangerous in some circumstances. In the given position, Black merely modifies his scheme with the powerful ...Ba5, which nails down the B/e3, thereby indirectly canceling the Rook's e7 threat.

The upshot of all this? White apparently has no clear way to improve his game after 24... Rbxc8. Black holds a mild strategic initiative.

The game continued differently. Steinitz played 24... Rfxc8 and proceeded to centralize his King (...Kd7). With the King thus placed, all his pieces would presumably come alive from their dreary defense. And were those lively pieces exchanged, the bold King could stroll forward (Kd7-e6-d5). But all this is rather fanciful: Black's King becomes a target because there are too many pieces left on the board.

24... Rfxc8 25. Nb3 Kg8 26. Ne4 Kf7 27. g3 Ke8.



As the King marches regally to his command post, Lasker seems unable to create anything. But actually, White, not wishing to alert his great adversary, is making the necessary moves before doubling Rooks on the e-file. Lasker plans to push his h-pawn, driving off the N/g6 and leaving the N/e7, as well as the King, vulnerable. The tactical problem is how to clear the e-file in time. Sacrifice is the answer.

28. Re2 Kd7 29. Rce1.

Now the obvious reply 29... Nd5 steps into a spectacular crossfire: 30. Bxh6 gxh6 31. Nec5† mating. The King's own attendants seal his fate. To avoid mate, Black should play 29... Nf5, and after 30. Bd2 Rf8 31. Bb4 Rbe8, given by Fine and Reinfeld, White lacks the knockout blow but keeps his advantage. Instead, Steinitz characteristically challenged the attack with:

29... Bb6 30. Bf4 Bc7 (forced). Both 30... Nxf4 31. Nf6† and 30... Nf5 31. Bxd6 lose. Lasker played **31. h4**, and the struggle concluded **31... h5 32. Bg5 Bd8** (As an exercise, refute 32... Re8.) **33. g4 hxg4 34. h5 Nf8 35. Nec5† dxc5 36. Nxc5† Kd6 37. Bf4† Kd5 38. Re5† Kc4 39. Rc1† Kxd4 40. Nb3† Kd3 41. Re3#.**

Lasker's persistence is instructive: as each barrier was thrown before him, he found a way around or through it. Stein-

itz may have been lulled or enthralled by the prospect of four consecutive King moves. Perhaps he was right, see the Move 29 improvement, but much safer plans were available. Safer than provoking a brilliant tactician.

Steinitz took a big risk when he had a perfectly sound method of continuing the game. His extraordinary King jaunt was unjustified both tactically and strategically. Unlike his glory days, the old champion in 1896 could no longer play in his favorite uncompromising style.

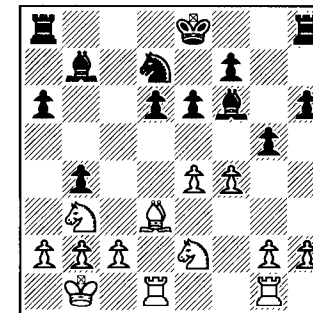
In summary, before entering a maneuvering game, analyze precisely to preclude tactical surprises. Once you have found some ideas, form a plan using the *elements of position*: pawn structure, placement of the pieces, and open lines.

Choose a scheme which holds some danger to the enemy. Play the least committal moves of your sequence first. This maintains flexibility, masks your intentions, and may create anxiety for the opponent. Or a few quiet moves may lull him into a false security, thinking he has nothing to fear.

In addition, try to discover the opposing scheme and preempt it. Such prophylaxis may take up most of your time, in terms of moves and calculating time. Remember that maneuver against an active opponent is nearly impossible. Pacify his game first.

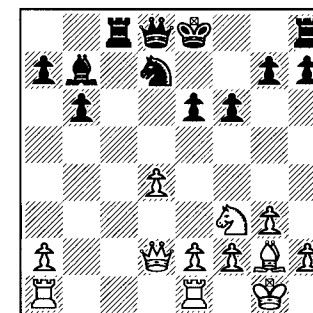
Lastly, analyze your proposed lines to see whether your scheme actually works. *Many blunders are really parts of recklessly appraised maneuvers*; the “strategist” simply overlooks an obvious point while preparing his deep plan.

EXERCISES



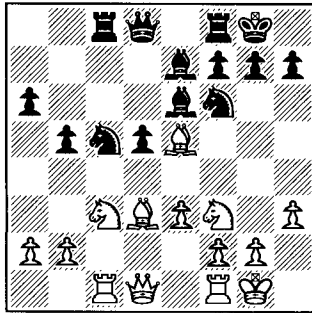
SCHEMING: In response to White’s threat, draw up a scheme to coordinate Black’s game. Hint: consider Black’s possible attack later along the g-file in your plan.

ANSWER: *Troianescu—Fischer, Natanya 1968.* The threat is 19. Na5 Bc8 (19... Nc5 20. Nxb7 Nxb7 21. g3) 20. Nc6 and White awakens. The parry **18... Bd8** began Fischer’s scheme: ...Bb6, ...Ke7, ...Rhg8 with plans to invade on the g-file, where White cannot oppose Rooks. The game went: **19. g3 Ke7 20. c3 a5 21. cxb4 axb4 22. Bc2 Bb6 23. Rge1 Rhg8 24. f5 Rgc8 25. Nec1 Ne5 26. Nd3 Nf3 27. Re2 Ba6 28. Rg2 Rc4 29. Ne1 Ne5 30. Rgd2 Rd8 31. f6† Kxf6 32. Rxd6 Rxd6 33. Rxd6 Rc6 34. Rxc6 Nxc6 35. Bd3 Bb7 36. Nd2 g4 37. Be2 h5 38. Nc4 Bg1 39. Nd3 Nd4 40. e5† Ke7 41. Bf1, 0-1.**



SCHEMING: White can play either Qd3 or Qe3. Describe with

ANSWER: Petrosian—Spassky, 8th Game 1969. White loses the Exchange for a pawn after 14... d4 15. Bxd4 Nxd3 16. Qxd3 Bc4. Remember to consider tactical threats first.



To describe the goal of study more vividly, let's consider an analogy between man and machine. A chess computer works from a set of instructions (the program) which evaluate a position. Based on this guide, the machine analyzes and renders a "best" move. The program designer can then examine the merits of the machine's performance and set about refining

the instructions. He compares the actual moves with an objective judgment of the position. The cycle of design, testing, and refinement should improve the computer's play.

Similarly, a chess player may program himself to play better by mastering various tactical devices and positional techniques. But he must have the same persistence and objectivity as the programmer; otherwise, the "program" that generates the poor moves cannot be corrected. Needless to say, progress becomes sluggish when you rely solely on learning from experience.

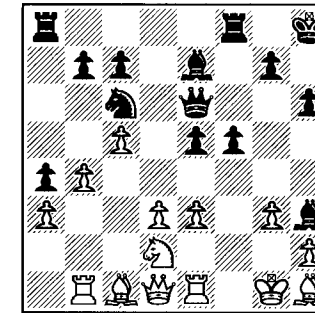
Acting as programmer, the player can refine his own judgment and chessic common sense. Whenever you find a puzzling idea, you have found a gap or an error in your conception of chess. Whenever you have made all the "right" moves and still suffer disadvantage, your intuition needs refinement.

A most practical instance of this self-programming is seen in the way a player analyzes games. Typically, many play through published games content to follow the drama and feel the joy of an unexpected combination. And, for recreation, this approach requires no justification. Mastery demands more than spectating, however. The would-be expert must search for moves, challenge annotators, and form his own judgments. Some practical guidelines for active participation form our next subject.

How to Analyze a Game

Suppose you come across this specimen from the World Champion's early praxis (*Khramtsov—Karpov, Moscow 1968*).

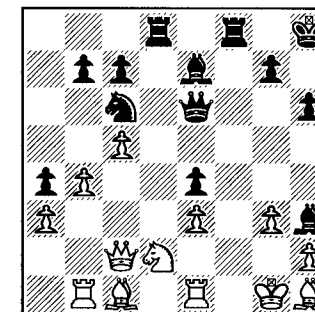
1. c4 e6 2. g3 d5 3. Bg2 Nf6 4. Nf3 Nc6 5. 0-0 Be7 6. b3 0-0 7. Bb2 d4 8. d3 e5 9. a3 a5 10. Nbd2 h6 11. Ne1 Be6 12. Nc2 Qd7 13. Re1 Bh3 14. Bh1 Ng4 15. Rb1 Kh8 16. Bc1 f5 17. b4 a4 18. c5 Qe6 19. e3 dxe3 20. Nxe3 Nxe3 21. fxe3.



Karpov writes: "Correct is 21... Rad8 22. Qc2 e4!" This pawn sacrifice seems promising all right, yet the note fails to show just how to pursue the kingside attack. Moreover, the strength of Black's game is unknown — is Karpov winning, or does he merely have the initiative? The brief comment passes over these questions, so let's have a look.

After the exchange of pawns, Black holds the f-file and can easily add his Queen and Knights to the fray. White's besieged King may be rescued, though, so the attack must soon commence. Noting these generalities, the enterprising student sets about work on a serious analysis.

The first task is clear enough: find what happens when White accepts the gift. He has three ways of capturing the pawn after 21... Rad8 22. Qc2 e4 23. dxe4 fxe4.



Analysis after 23... fxe4

1) 24. Qxe4 seems solid, bringing the Queen over to defend. Black must harry this new target: 24... Qf7 25. Qf3 (on

25. Qf4, 25... Qa2 26. Rb2 Qxb2) Qg6 26. Qe2 Bf5 (26... Ne5 27. Bb2 Nd3 28. Be4 Bf5 is unclear) 27. e4 (27. Rb2 Bf6) Bg4 28. Qb5 Nd4 29. Qc4 Be6 30. Qc3 Qf6 wins.

2) 24. Nxe4 is also plausible: 24... Ne5 25. Bb2 Nd3 26. Red1 (or 26. Re2 Bf5) Nxb2 27. Rxd8 Bxd8 28. Qxb2 Bg5 29. Qe2 (on 29. Qd2, 29... Qb3 30. Re1 Qxe3†) Qg4 30. Qd2 Rd8 31. Qe1 Bxe3†. Note the consistency, the persistence of the attack. (As an exercise, study 25... Nf3†.)

3) 24. Bxe4 fails to 24... Qf6 25. Nf3 Ne5.

The lines above illustrate the basis of Karpov's attack. Look close and you will see that in each line the aggressor chooses the most dangerous threat, beginning with mate on f2. *The secret to game analysis is in starting the search with the sharpest moves*, arranging the possible threats hierarchically. So systematically eliminate the oversharpest ideas before concentrating on deeper analysis, and you avoid groping about.

With published analysis, simple notes often require substantial study to confirm. Especially when you find the writer's suggestion unconvincing because he gives little background material. (Lengthy notes, paradoxically, are usually easier to verify.) In such cases, the game continuation may help explain some of the players' decisions. In the example above, Karpov wrongly allowed a Knight exchange that dissipated his advantage. Compare the Move 21 analysis to White's freedom in the actual game. From the diagram (after 21. fxe3):

21... e4 22. dxe4 Ne5 (22... fxe4) **23. Nf3 fxe4 24. Nxe5 Qxe5 25. Bb2 Qf5 26. Qc2 Bg5 27. Bxe4 Bxe3† 28. Kh1 Qg5 29. Bxg7† Qxg7** (29... Kxg7 30. Qc3† Kg8 31. Rxe3 Rad8 32. g4 — Karpov) **30. Rxe3 Rae8 31. Rf3** (31. g4 — Karpov) **Rxf3 32. Bxf3 Re3 33. Bxb7 Rxa3 34. Qe4 Qf6 35. Qe8† Kg7 36. Bd5 h5 37. Qe2** (37. Qe1) **Ra1 38. Qc2 Qf1†, 0-1.**

The competing plans in Khramtsov—Karpov produce a generally logical picture. White breaks the central blockade, trades

pieces, and averts the attack; given a second chance when White errs, Black returns to his old theme and topples the immobile King. Note the sense behind the errors: White neglected to destroy the h3 wedge, and Black failed to efficiently prevent simplification. The oversights center on the strategic question “Can White free his King from the vise?” This question gives coherence to tactical study of the annotations.

Besides drawing on the logical development of a game for clues, your expectations may help you analyze. *Moves that upset your expectations should be studied.* When these unusual moves prove successful, discover why you did not anticipate them. Perhaps the startling move was “too aggressive” to seriously consider. In such a case, you have overlooked a tactical point. Similarly, a defender's “unnecessary” concession may be in response to a hidden threat — it means your intuition has not detected the danger. The point to remember is that expectations reflect your intuition and make up a vital part of your analytic skill.

For purposes of analysis, *the critical stages of a game are three:*

1) the result of the opening, which gives perspective on the following middlegame;

2) the point where an advantage was gained or lost, which explains the strategic clash; and

3) the losing move, which separates the battle for supremacy from the technical realization of advantage. Competent annotators (granted time and column space) try to locate and describe these strategic turning points.

Find the Losing Move

Foremost among critical points is the losing move. Take some care to pin down the error; try to distinguish between losing and “merely” difficult positions — the difference is vital for analysis, if not always for practical play.

When the decisive move is hard to find, try working backward from a clearly lost position until the game seems roughly balanced. Then, working forward, look where the winner's initiative gathers strength or where the combinations begin.

The losing move should lie nearby. Beware: **annotators often surreptitiously indicate the losing move with phrases such as “his last chance was ...” or “slightly better was ...”**

Other turning points in the game can be found by an analogous bracketing procedure. When the initiative changes hands, fix the error between two clear positions, one favoring White, the other, Black. Then analyze the plan that failed to discover the approximate point of breakdown, where the tide shifted. At that move, scrutinize the game for surprise attacks, tempo wins, and a general freedom from difficulty for one player. By separating the opposing strategies, you begin cleaving through the complications to expose the crucial move. To complete the work, analyze what the loser should have done and how the winner would respond. Finally, should Black emerge from the opening at a disadvantage, search for the error on your own first, then look into the books for confirmation. The practice will strengthen your opening play.

Working forward and backward to narrow the search is less effective in those positions that commit the players to long, semiforced lines. In such cases, one of the plans may have been doomed from the start, and improvements must be sought far from the decisive combination.

The following game is analyzed in a fashion similar to the approach a master might take. The comments represent the thoughts of a player looking at this game for the first time.

Thomas—Rubinstein, Hastings 1922

1. e4 e5 2. Nf3 Nc6 3. Bb5 a6 4. Ba4 Nf6 5. Qe2.

An interesting departure from the usual 5. 0—0. Maybe Sir George didn't want to face the Open Defense, 5... Nxe4, favored by Rubinstein.

5... b5 6. Bb3 Bc5.

Looks active, but Black must watch for White's sequence

0-0, c3, Rd1, d4 — the d4-square really belongs to White. There's no danger yet, still 6... Be7 was more solid.

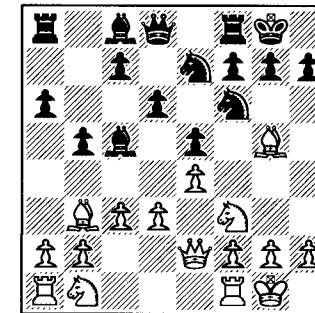
7. c3 0-0 8. 0-0 d6 9. d3.

Solid, according to Thomas' style. Maybe he's looking for a draw.

9... Ne7.

This is strange. Why doesn't he complete development first with 9... Bd7, 9... Be6, or even 9... Bg4? Also interesting — to counter the Bg5 pin — is 9... Kh8, 10. Bg5 h6 11. Bh4 g5, and now 12. Nxe5 is faulty because of 12... hxe5 13. Bxe5 Rg8. But after 9... Ne7 White gets a nice game with 10. d4.

10. Bg5.



What? 10. d4 exd4 (forced) 11. cxd4 Bb6 is great for White. The follow-up might be 12. e5 or 12. Bg5, when Black's in trouble. It's strange for both players to miss this.

10... Ng6 11. Nh4.

Black threatened to break the pin (11... h6). It appears White wants a draw. If so, he probably would have gotten easy agreement after d3-d4 on Move 10 or 11.

11... Nxe4 12. Bxe4 h6.

Does he intend g7-g5? Yes, that might lead to a kingside attack because Black gains time pushing the Bishop around. Rubinstein wants the center quiet so he may attack on the wing. Therefore, White's counterplay should still be with d3-d4 — the sooner the better.

13. Kh1.

He can't play f2-f4, so the plan must be f2-f3 and Bf2.

13... g5 14. Bg3 Kg7 15. Nd2 Qe7 16. Bc2.

This looks passive. White needs counterplay in the center. 16. Rfe1 is obvious, although d3-d4 immediately thereafter involves a sacrifice: 16... Bd7 17. d4 exd4 18. e5 dxe5 19. Bxe5 or 16... Bb7 17. d4 exd4 18. e5 dxe5 19. Bxe5 Rae8. Evidently Thomas wants to play 17. Nb3 and then d3-d4 without a sacrifice. However, Black (even after 16. Rfe1) can hold the center (Bc5-b6) and keep some kingside threats (h5-h4).

16... Bd7 17. Rfe1 Rae8 18. a4.

This line opening doesn't seem too valuable: 18. Nb3 Bb6 19. d4 still looks best, challenging the wing attack in the classic way. If this alternative works, then maybe Black's deliberate build-up ...Qe7, ...Bd7, ...Rae8 is too slow.

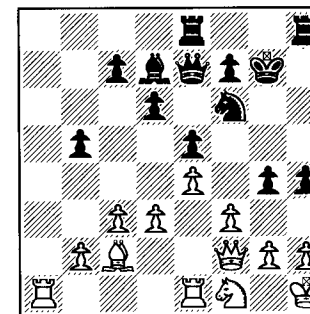
18... Rh8 19. axb5 axb5 20. Nf1.

Again passive, and White slips into a critical position. 20. Nb3 is better.

20... h5 21. f3.

Maybe 21. h4 could stall the advance: 21... g4 or 21... gxh4 22. Bxh4 gives White some time to consolidate. No, 21... Ng4 is powerful, forcing White to open lines: 22. f3 gxh4 23. fxg4 hxg3. So the attack now looks strong.

21... h4 22. Bf2 Bxf2 23. Qxf2 g4.



Opening lines on schedule, although a little preparation (23... Nh5) might be preferable.

Now 24. f4 g3 is good for Black, but let's analyze further — 25. Qf3 exf4 26. Qxf4 Nh5 (keep after him!) 27. Qe3 gxh2. Black has stopped both sealing moves, f4-f5 and h2-h3, and intends to gain more ground along the g-file. His next move is probably 28... Rh6. Nevertheless, the kingside terrain may be contestable if White can transfer his pieces in time.

24. fxg4 Nxg4 25. Qf3 h3.

Sharp. The point is. . .yes, 26. gxh3 Rxh3. Now 26. g3 is forced and the King is wedged in.

26. g3 Qg5 27. Ne3.

White may escape if he can dislodge the Q/g5. Then by opposing Rooks he can relieve the beleaguered King. It's up to Rubinstein to stop this.

27... Ra8.

Just in time to deal with 28. Nxg4 Bxg4 29. Qe3.

28. Nxg4 Bxg4 29. Qf2 Rxa1.

What's this? Giving up the file?

30. Rxa1 Ra8.

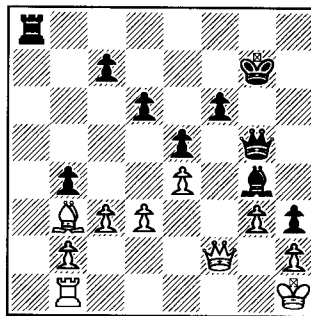
Oh, of course, there's a back-rank threat, Qc1†.

31. Rb1.

Why not 31. Rf1? White may already be lost, but continued passivity makes it easy for the opponent. On 31. Rf1, 31... f5 32. exf5 Qxf5 33. Qe1 Qg5 needs analysis. Also, 32. d4 in this line opens the black kingside to attack. Rubinstein would probably play instead 31. Rf1 f6. This move might be White's last chance — if so, we'll come back to it and examine 31. Rf1 more closely.

31... b4.

Another blow: 32. cxb4 Rb8 is grim for Thomas. Apparently Black wants to swap pawns on c3 then play ...Ra2, pinning the Bishop. If 31... Ra2 right away, 32. Bb3 evicts the Rook. A motif lurking nearby is the combinative removal of White's Queen. For instance, after 32... bxc3 33. bxc3 Ra2, Rubinstein threatens 34... Rxc2. 34. Qxc2 Qe3 35. Rf1 Bf3† 36. Rxf3 Qe1† mating.

32. Bb3 f6**33. c4.**

Terrible, locking up the Bishop. Why not simply 33. Bd5?

There must be a reason for such a grave concession (33. c4) and why the natural 33. Bd5 fails. 33. Bd5 Rf8 34. Kg1 (or 34. Rf1) f5 35. exf5 Rxf5 36. Qe1 doesn't lose immediately; the B/d5 aids the defense. And 33. Bd5 Rb8 34. c4 Rb6 fails, inasmuch as Black cannot play c7-c6.

There must exist a serious threat, something that forces Thomas to entomb his own Bishop. Let's see, 33. c4 stops bxc3, so perhaps there's a start. A plausible line would begin with 33. Bd5 bxc3 34. Bxa8 — yes! — 34... c2! 35. Qxc2 Qe3 and mate as before. If 33... bxc3, 34. bxc3 Ra3 picks off a pawn. Now it's clear. Thomas didn't relish the prospect of being a brilliancy victim. That is what led to 33. c4. Nevertheless, better was 33. Kg1.

33... f5.

At last, the decisive line opening, strategically speaking.

34. Kg1 fxe4 35. Rf1.

Why not at least 35. dxe4? Then 35... Rf8 36. Qe1 Rf3 (or even 36... Bf3 37. Bc2 Bg2 38. Qe2 Rf3 39. Re1 Rxc3) 37. Bd1 Re3 38. Qf2 Rxe4. White, by 35. Rf1, strives for attack, and he appears to have some threats.

35... e3.

Interesting, but is the King safe enough? Rubinstein had a disturbing propensity to blunder in his later games.

36. Qf7† Kh8 37. Qd5 c6.

Good. Gives White no respite.

38. Qxc6 Rc8 39. Qe4 e2 40. Re1 d5.

Relentless. Everything played with a gain of time. Now 41. Qxd5 loses to 41... Qe3†.

41. cxd5 Rc1, 0-1.

To clarify any points not already answered, the analyst would replay the game. He might well look at the following:

- 1) Was there a hidden justification of 9... Ne7? If so, should Thomas have refrained from 10. d4?
- 2) Could the central push with d3-d4 have equalized? At what move?
- 3) Were the improvements 16. Rfe1 (in place of Bc2) and 18. Nb3 (for a2-a4) real or imagined?
- 4) Was the line 31. Rf1 f6 playable for White?
- 5) Were all of Black's combinations sound?

Further analysis of these questions would give quite a thorough understanding of the game. The queries focus, respectively, on White's decision not to strike in the center, the point at which Thomas made the losing move, and Black's tactical play.

Fundamental to the winning combination are the moves which prepare it. Because the battle is already over when the brilliant attack arrives, the analyst looks for the turning point much earlier in the game. In the next example, the losing move is elusive. Let's take the game from the top, using our narrative method; parenthetical comments that follow are the result of a second look.

Petrosian—Tal, Moscow 1963

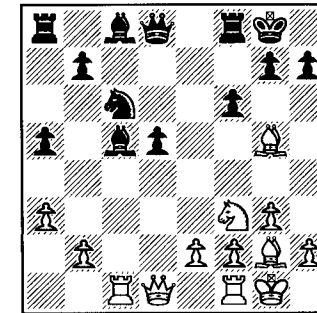
1. c4 Nf6 2. g3 e6 3. Bg2 c5 4. Nf3 d5 5. 0-0 Nc6 6. cxd5 Nxd5 7. d4 Be7 8. Nc3 0-0 9. Nxd5 exd5 10. dxc5 Bxc5 11. a3 a5.

So far, a Tarrasch Defense in which the isolated d-pawn's weakness slightly outweighs Black's active pieces. 11. a3 is a typical Petrosian move, encouraging an opposing pawn weakness at little cost to himself.

12. Bg5 f6.

Rather committal; even more so was 12... Qb6, sacrificing a pawn for active play. (*Darga—Portisch, Beverwijk 1964*, without the moves 11. a3 a5, went 11... Qb6 12. Rc1 d4 13. Nd2 Rfe8 14. Nb3 Bf8 15. Qd3 a5.)

13. Rc1.



That's interesting. Black actually loses a pawn after 13... Bxf2† 14. Rxf2 fxc5 15. Nxc5 Rxf2 (15... Qxc5 16. Qxd5† Qxd5 17. Bxd5† Be6 18. Bxe6†) 16. Qxd5†. So White gains time. (The maneuver Bg5 and Rc1 is well known in this defense.)

13... Ba7 14. Bf4 Be6 15. Ne1.

The standard plan, blocking the d-pawn and preparing to attack it.

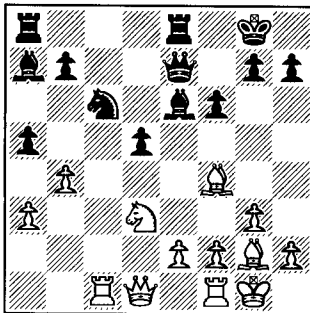
15... Re8 16. Nd3 Qe7.

16... d4 looks reasonable, trying for ...Bd5. But c5 was weak: 17. Nc5. Not, however, 16... d4 17. Rxc6 bxc6 18. Bxc6 Bd5 with plenty of compensation. Tal aims for his favorite Rook setup on the center files, but the next move distracts him.

17. b4.

Sharp, striking before Tal consolidates with ...Rad8. In view of what follows, 17... Rad8 seems better, bringing the last piece

into play. After securing the d-pawn, Black can turn to attacking b4 and e2. On 18. Qa4 Bg4 19. Rfe1 Qf7 Black gets counterplay.



17... axb4 18. Nxb4 Nxb4 19. Rc7.

A nice in-between move that disrupts Tal's setup.

19... Qd8 20. axb4 g5.

If forced, a major concession. The alternative 20... Rb8 21. Qd3 Bb6 22. Rc2 Ra8 23. Rd1 looks grim. But 20... Bb8 21. Rxb7 Bxf4 22. gxf4 d4 gives chances: 23. Qd3 Bd5 24. Qxd4 (24. Bxd5† Qxd5 pressures e2 and the King) Bxb7 25. Qc4† Kh8 26. Bxb7 Rb8 27. Bc6 Qc8. After 20... g5, though, Black should be lost if he doesn't win material immediately; all he can hope for are exchanges and a draw.

21. Qd3 Re7 22. Rxe7 Qxe7 23. Be3 d4.

What else? Trading Bishops leaves a pin and too many holes. 23... Qxb4 24. Rb1 Qe7 25. Bxd5 is also unpleasant.

24. Bxd4 Rd8 25. e3 Bxd4 26. exd4 Qxb4 27. d5 Qd6 28. Be4 Bf7.

Interesting. What happens on 28... Bxd5? The simple 29. Rd1 is worth only half a point after 29... Bxe4 30. Qxd6 Rxd6 31. Rxd6 Kg7. Better is 29. Bxh7† Kh8 30. Rd1 Qe6 31. Be4

winning the Exchange decisively this time.

The next idea to look at is saving the h-pawn: 28... h6 or 28... h5. The obvious 29. dxe6 Qxd3 30. Bxd3 Rxd3 31. e7 Kf7 fails to win. On the preliminary 28... h5 (or 28... h6), 29. Bh7† Kf8 (forced, 29... Kh8 30. dxe6) 30. Qg6 Bxd5 (30... Bf7 31. Q(x)h6† Ke7 32. Bf5 Qxd5 33. Re1† Kd6 34. Qxf6† wins) 31. Re1 wins.

(In considering the *idea* of moving Black's h-pawn on Move 28, the analyst doesn't check both moves separately, calculating a line with each. Rather, the pawn is simply "removed" from h7 and later placed on whichever square offers the stoutest resistance to White's attack. In this case, the pawn survives longer on h5 [see the subvariant, Move 31], so in the main line the pawn retroactively goes to h5. The choice makes little difference here, but often such fluid analysis is valuable. *Time is saved when several branches of calculation can be treated as one.*) Back to our game:

(28... Bf7) **29. Bxh7† Kg7 30. Be4 Qc5 31. Rb1.**

With d5 safe, the Rook tries to crash the seventh rank.

31... Rd7 32. Qf3 Bg6 33. Bxg6 Kxg6 34. Qd3† Kg7 35. Rb5 Qe7 36. Qf5 Rd6 37. Kg2 Qd7.

White would probably force the Queen trade anyway, after h2-h4 exposes Black's King. Now the white King advances.

38. Qxd7† (Would Tigran ever pass up a favorable exchange?) **Rxd7 39. Kf3 Re7 40. Rb6 f5 41. d6 Rd7 42. h4 Kf6.**

42... gxh4 gives up another passed pawn.

43. hxg5† Kxg5 44. Ke3 Kf6 45. Kf4 Ke6 46. f3 Kf6 47. Rb5 Ke6 48. Rxf5 Kxd6 49. g4 Ke6 50. Rf8 b5, 1-0.

Tal's 17th, 17... axb4, evidently was the losing moment, and his 20th move certainly deprived him of any counterchances. We could verify these facts only after White's final attack proved decisive. Consider, for instance, where the losing move would be if the drawing 28... Bxd5 29. Rd1 were forced.

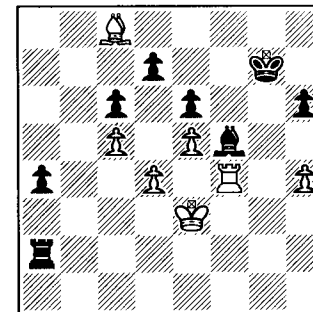
Again, when the turning point is not obvious, the principle consists of working back from a clearly won position to establish the fatal error. In contrast, a superficial analysis — which none of us dare contemplate — starts with the point where the winner's game “looked good” and assumes that all went well. This is called annotation by result, and is the most prevalent scourge of the literature. Studying games using this method is likewise a waste of time. There is apparently no royal road to mastery of chess; challenging one's assumptions is demanded.

Challenge the Annotator

Whatever the detail of the notes, you should at least play through all the lines given by the writer. And if you have any doubts as you study a game, challenge the analysis.

Begin your inquiry with a self-critical attitude. Assume that your doubts about the published notes are mistaken. Look for lines consistent with the game's strategy which support the notes. Search for something simple, a short variation, before revamping the winning plan. What you imagine to be a rebuttal to the annotator may be a sideline you've mis-analyzed.

In the diagrammed position (*Morrison—Capablanca, London 1922*), Black proceeded to win, seemingly without trouble. The passed pawn monopolized White's attention while a central breakthrough was organized.



**45... Ra3† 46. Ke2 Rc3 47. Bxd7 a3 48. d5 cxd5
49. c6 Kf7 50. Ra4 Ke7 51. Ra8 d4 52. Re8†
Kf7 53. Ra8 Be4 54. Ra7 Rc2† 55. Ke1 a2 56.
Kd1 d3 57. Bc8† Kg6, 0-1**

But in a note to White's 48. d5, one annotator somewhat hesitantly writes that 48. Rf1, although better, would still lose, “slowly but surely.” Skeptical, I tried to save White's game after 48. Rf1 because there seemed nothing slow about the d7-Bishop's queenside threats.

The first point to notice is that 48. Rf1 Bd3† fails to 49. Kd2. So Black would try his next most potent threat, promotion. Following 48... a2 49. Ra1 Bb1 50. Bxe6, Black's Rook snare is too costly. Predictably, the pawn hunt 48... Rd3 49. Bxe6 returns empty-handed. More leisurely plans for Black are unconvincing because of the threat to c6: 48... Rc2† 49. Ke3 Rb2 50. Ra1 Rb3† 51. Ke2 or 48... Kf7 49. Bxc6 a2 50. Ra1 Bb1 51. Bf3.

Given the passed a-pawn and White's exiled Bishop, Black ought to have excellent winning chances from the diagrammed position. So if 48. Rf1 draws, let's look for an earlier improvement in Black's play that does finally win.

The first line given (48. Rf1 Bd3† 49. Kd2) may hold a clue: White escapes only by attacking the Rook. Perhaps Capablanca should earlier have tried 46... Rb3, which stops the resource 48. Rf1. Although Black loses a move — he must still play ...Rc3 later — White might not have any way to profit. We begin by following Capablanca's plan to see how the time lost

affects play. From the diagram, **45... Ra3† 46. Ke2 Rb3** and now:

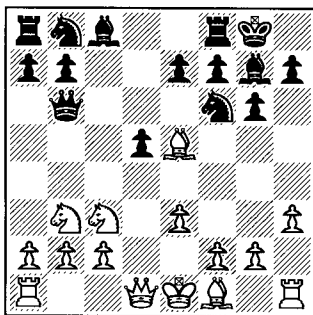
a) **47. Bxd7** a3 48. d5 cxd5 49. c6 Rc3 (In the game it was Black's move here, with the Rook on c3, and he played ...Kf7.) 50. Ra4 Kf7 51. Kd2 (In case 51. Ra7, ...Ke7 [not the amusing helpmate 51... Kg6 52. Be8#] 52. Ra4 d4 transposes to the main line in the (a) variation.) Rd3† 52. Ke2 Ke7 (threatening 53... d4) 53. Ra8 Rc3 54. Ra4 d4 55. Rxd4 Bc2 and Black promotes shortly;

b) **47. d5** a3 48. dxc6 (or 48. Ra4 exd5 49. Ra7 Kf7 50. Bxd7 Bxd7 51. Rxd7† Ke6 52. Rd6† Kxe5 53. Rxc6 a2 54. Ra6 Rh3) dxc6 49. Bd7 (or 49. Ra4 Rc3 50. Ra5 a2) Rc3 50. Bxc6 Rxc5 wins another pawn.

Conclusion: Despite the lost time, Capablanca's plan still wins. The improvement 46... Rb3 precludes 48. Rf1 and forces White into the predetermined line. There may, of course, be an earlier improvement for Black that wins more easily, but as we have discovered the last error, that task is left to the enterprising reader (see the diagram)!

Another *Capablanca* game, versus *Yates* (Black) at *New York 1924*, suffers from annotations-by-result. The Cuban's brilliant middle- and endgame play has convinced the commentators that his opening moves forced Black to create fatal weaknesses.

1. d4 Nf6 2. Nf3 g6 3. Nc3 d5 4. Bf4 Bg7 5. e3 0-0 6. h3 c5 7. dxc5 Qa5 8. Nd2 Qxc5 9. Nb3 Qb6 10. Be5.



Now Yates played **10... e6** and Capablanca went on to win in classic style. Alekhine, in the tournament book, claims this feeble pawn move is “clearly forced on account of the threat of 11. Bxf6, followed by Nxd5, etc.” And Golombek adds: “If 10... Be6, 11. Bd4 Qd8 12. Nc5 and White gains the advantage of two Bishops.”

Neither annotator mentions, however, the obvious reply 10... Nbd7. Should White carry out his threat, 11. Bxf6 Nxf6 12. Nxd5 Nxd5 13. Qxd5, then 13... Bxb2 favors Black. The other capture, 11. Nxd5, leads to 11... Nxd5 12. Bxg7 Nxe3 13. Bd4 Nxd1 14. Bxb6. And now Black can seize a pawn, 14... Nxb2 15. Bd4 Na4, or simply play 14... Nxb6 15. Rxd1 Bf5. Finally, if White tries 11. Bd4 Qd8 12. Nxd5, then ...Nxd5 13. Bxg7 Nxe3 is good for Black.

When you remove the famous name from consideration of White's unusual opening moves, it is easy to see that Black must be all right. Yates played sensibly, created no weakness (until the tenth move, that vindicated Capablanca's waiting game), and castled safely. To believe that 10... e6 is forced, you must find Black's earlier error — but none can be found. With a little critical thought, neither Alekhine nor Golombek could have missed 10... Nbd7. *To the analyst, only the moves should count.*

Surviving Sudden Death (Time Controls)

In recent times, Sudden Death has become the standard time control. Players raised on 40/90 or 40/2 often have trouble apportioning their time and maintaining concentration under this Damoclean Sword. The following time management approach may help.

First, find out how much usable time you actually have, time not reserved for “technical” matters. Estimate the number of minutes that you need to play your prepared opening moves, up to the point that you transition to the middlegame. Then note the time it takes you to play out a typical *basic chess ending* such as R+P vs. R (including any subsequent Q vs. R ending) to mate or stalemate. Add a panic factor: “If I don't

have five minutes at the finish I get palpitations.” Subtract the opening, basic ending and panic factor from the time control. What remains is thinking time.

Now apportion the thinking time over these three stages:

- (1) the opening-middlegame transition—say, 20%,
- (2) the middlegame—50% and
- (3) the non-Basic endgame—30%.

The percentages should reflect the relative importance of each stage in **your** style of play. (These numbers and divisions are for illustration—adjust them as needed.) Figure the actual minutes for each stage. Treat each stage as a time control.

Using a Game/60 control, a hard-fought game might tick away like this:

Prepared Opening	5 minutes
Opening-Middlegame Transition	8 minutes
(20% of the remaining 40 minutes, i.e. 60 m-5 m-10 m-5 m = 40 m)	
Middlegame	20 minutes (50%)
Endgame	12 minutes (30%)
Basic Ending to Checkmate	10 minutes
Game ends here	
Panic Factor	5 minutes left on the clock

The limited time for each stage may be a shock. At any rate, it clarifies your standing: If you exceed the time allotment for any stage, you’re in time trouble. Make up the deficit in the next stage (or panic). Calculate less, intuit more. If you use much less than the allotment, look for ways to set more problems for the opponent.

A few suggestions to flush out wasted time:

Play the opening confidently, don’t dawdle or get sidetracked trying to rewrite the book. If you’re a slow starter, play a practice game before the first round. When a move is forced or obviously strong, play it immediately. When the opponent plays the expected move respond quickly. Play winning technical endings by the book method, forget shortcuts.

Calculate only when necessary. Ask:

(1) *Do I really need to calculate?* Can I use logic, memory or intuition instead? “There are several candidate moves, but I know Rooks belong behind passed pawns.”

(2) *What am I trying to do?* “I’m threatening his King in order to force his pieces into retreat. But first I need to ensure that his sacrifice doesn’t work.”

(3) *How many minutes is this idea worth?* “If 1. Bxh6 doesn’t look decisive after thinking for three minutes, I can prepare it with the logical 1. Rg1 instead.

Keeping Cool

Make these suggestions an unshakeable part of your routine: Expect to be surprised several times during the game; with luck, they’ll be pleasant ones. Maintain a reserve of will-power to overcome new challenges. Monitor your state of mind: when upset, take a short break; when invincible, expect a surprise. Repeat: The opponent is under pressure, too. Know your Achilles’ Heel and protect it.

Avoiding Blunders

As your analytic eye sweeps the board: Ask: “What is he trying to do?” Name his threat(s). Note all undefended material—the opponent is watching yours—“Does my move unprotect anything?” Use the moment before moving to look at the board for simple threats, checks, double attacks.

Finding tactics.

A summary of ideas already covered: Search for threats starting with the most serious: “I guess I’d better check out ...Bxh2† before I execute the subtle Nc3-d1-e3.” Use generalizations as assumptions to build upon: “My Knight beats his Bishop in the coming endgame, so how can I use his inability to exchange Queens to gain the initiative now?” Always look for fantastic possibilities. The reason they fail can be the idea for a combination: “1. Nf5 gxh5 2. Qg3† Kh8 3. Bh6 would mate

except for 3... Rf8-g8. Can I deflect his Rook or make use of its immobility?" Always look for fantastic possibilities. Sometimes they work! Look at the board from the opponent's point of view. Analyze one move beyond any combination. (OK, mate excepted.) When you know where your pieces should go, try different move orders. *The essence of combination is double attack:* "His King is exposed and his N/b6 undefended. Can I attack both the Knight and King somehow?"

Don't ask, "Can I get away with this sac?" That's defeatist. Calculate sacrifices with complete abandon—imagination costs nothing. Throw everything at him! The brilliant sac must first be dared before it can be found.

To practice tactics, solve any puzzles that come your way: "Test your Tactical Ability," "What's the Best Move?" etc. Prepare for discomfort when you don't score 100%. See if the things you miss fall into patterns. Study groups of similar games to find tactics that are part of your actual opening/middlegame repertory.

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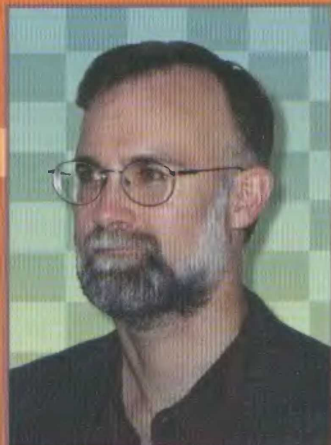
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